Special Edition

KARAM®

knowing your needs better



DIVE INTO OUR

EXPANDING PRODUCT LINES

100+ Exporting Countries

50+ Global Offices

07 Manufacturing Units

4200+ Professionals

3500+ Certified Products

100+ Million Dollar Revenue

DISCLAIMER

The information provided in this catalogue is based upon the technical data that KARAM obtained under laboratory conditions and believes to be reliable. KARAM does not guarantee results and takes no liability or obligation in connection with this information. As conditions of end use are beyond our control it is the user's responsibility to determine the hazard levels and the use of proper personal protective equipment. Persons having technical expertise should undertake evaluation under their own specific end-use conditions, at their own discretion and risk. Please ensure that this information is only to check that the product selected is suitable for the intended use. Any product that is damaged, torn, worn or punctured should be immediately discontinued from usage.

INTRODUCING FRONTIER:
ELEVATING SAFETY SOLUTIONS FOR EVERY INDUSTRY

Our latest Personal Protective Range offers a plethora of new and enhanced offerings keeping in mind the changing customer needs. With introduction of the all-new Frontier range of safety helmets, eyewear, ear protection, safety gloves, workwear and safety footwear, KARAM aims to reach out to its customers in unexplored markets with varied requirements. Complying with the latest product certification standards, the Frontier range of PPE carries the same stamp of quality assurance that has been moulded for over more than 25 years at KARAM.

We welcome you to explore our extensive product portfolio and reach out to us for any enquiries at 1800 103 7085.

Safe Regards,

Team KARAM

Our JOURNEY

KARAM

2024

- Strategically acquired Midas Safety India, a prominent player in hand protection, solidifying the position as the leading safety solutions provider through this inorganic growth
- Enhanced African market penetration through the acquisition of HSE Solutions, leveraging its robust distribution network

2023

Reached a remarkable milestone, marking 25 years of dedication to industrial occupational safety

2014

Established a dedicated safety Training and Consultancy Facility, providing expert training and tailored consultancy services to raise awareness and enhance workplace safety across various industries

2015

Established a new warehouse in the USA and strengthened the dealer-distributor network in the Middle East, fostering better lead times to our customers

2016

Established sales offices in Australia, South Africa, and South America, expanding the global footprint and improving accessibility to safety solutions in these key markets

2013

Introduced advanced automation and robotic processes, optimizing production efficiency and ensuring precision in the manufacturing of safety solutions

2012

Established a new sales office in Dubai and consolidated the base in France, reinforcing strategic presence in key markets and enhancing the ability to support and engage with customers globally

2011

Expanded our product line with Fixed Line Systems, providing vertical and horizontal lines, engineered for safety

1998

KARAM was founded, marking the beginning of a journey dedicated to advancing industrial safety through innovative solutions and high-quality personal protective equipment

1999

Became the first Indian company to achieve CE certification for its fall protection equipment, underscoring its commitment to international safety standards and quality

2004

Expanded operations by establishing a second vertically integrated manufacturing setup in Lucknow, U.P., enhancing production efficiency and control across the entire manufacturing process

Our JOURNEY

KARAM

2022

Expanded the manufacturing footprint to over 50 acres with the establishment of a state-of-the-art rope and webbing manufacturing unit in Sandila, U.P.

2021

Set up a complete in-house manufacturing of internationally certified respiratory protection to maintain stringent quality standards

2020

Extensively supported the government by supplying critical PPE amidst severe shortages like masks, coveralls and chemical splash goggles during COVID-19

2017

Launched a comprehensive range of safety gloves and protective workwear, expanding the PPE portfolio in India

2018

KARAM announced a strategic partnership with STANLEY BLACK+DECKER, one of the world's largest tools and storage company, combining strengths to deliver innovative and high-quality safety solutions in India, Middle East and SAARC countries

2019

Established a new sales office in South Africa, strengthening the global presence to serve customers specific needs in the region and meeting growing demands

2010

Established a state-of-the-art manufacturing facility in Sitarganj, Uttarakhand, advancing production capabilities with cutting-edge technology to meet growing market demands

2009

Introduced a premium range of full-body harnesses and retractable fall arrestor blocks, offering superior safety and comfort for fall protection in demanding work environments

2008

Established multiple regional offices across the country, enhancing local support and service capabilities to address the increasing needs of customers in various regions

2005

Set up a new manufacturing unit in Rudrapur, Uttarakhand, aimed at increasing production capacity and supporting regional growth

2006

Stepped into the world of personal protective equipment (PPE), providing an extensive range of solutions designed to ensure safety and enhance protection

2007

Expanded the PPE range with the introduction of safety footwear, offering supreme quality, protection and comfort

KARAM

CONTENTS

SECTION	PAGE
About Us	I
Manufacturing Excellence	II
Operations	III-VII
R&D and Testing	VIII
Global IP	IX
Truly Global	X
Our Presence	XI
Certifications	XII-XIII
Our Services	XIV-XV
Embracing Green Manufacturing	XVI
Environmental, Social and Governance	XVII
PERSONAL PROTECTIVE EQUIPMENT	**01-194**
Respiratory Protection	**01-38**
KARAM Range of Products	01-28
NEW! FRONTIER Range of Products	29-38
Head Protection	**39-56**
KARAM Range of Products	39-54
NEW! FRONTIER Range of Products	55-56
Eye Protection	**57-72**
KARAM Range of Products	57-68
NEW! FRONTIER Range of Products	69-72
Hearning Protection	**73-82**
KARAM Range of Products	73-80
NEW! FRONTIER Range of Products	81-82
Face Protection	**83-88**
KARAM Range of Products	83-86
NEW! FRONTIER Range of Products	87-88
Protective Workwear	**89-98**
KARAM Range of Products	89-96
NEW! FRONTIER Range of Products	97-98
Hand Protection	**99-148**
KARAM Range of Products	99-128
NEW! FRONTIER Range of Products	129-148
Foot Protection	**149-192**
KARAM Range of Products	149-191
NEW! FRONTIER Range of Products	192
Gas Detectors	**193-194**
FALL PROTECTIVE EQUIPMENT	**195-401**
Full Body Harnesses	**195-232**
Hooks and Karabiners	**233-250**
Lanyards	**251-274**
Anchorages	**275-288**
Temporary Anchorage Line Systems	**289-304**
Retractable Fall Arrester Blocks	**305-322**
Confined Space Entry	**323-344**
Rope Access and Rescue	**345-358**
Self Contained Safety Kits	**359-365**
Material Hauling Systems	**366**
Load Arresters	**367-368**
Fixed Line Systems	**369-398**
Safety Fan Net	**399-401**
INDEX	**402-410**



KARAM

ABOUT Us

KARAM is a leading global brand in occupational safety, offering a portfolio of over 3,500 certified products that meet various national and international standards. With exports to over 100 countries, our team of 4,200+ professionals continuously develops, tests, and refines our products. This dedication has earned KARAM a reputation as a top provider of world-class personal protective equipment (PPE), fall protection solutions, and fixed-line systems.

Our CRISIL A/Stable/CRISIL A1 rating highlights the strong market position of the KARAM Group. Beyond business, we are a responsible brand committed to empowering people, uplifting communities, and enhancing the environment.

Total Factory Area Over

50-ACRE



Lucknow
Uttar Pradesh Unit-1



Lucknow
Uttar Pradesh Unit-2



Lucknow
Uttar Pradesh Unit-3



Sandila
Uttar Pradesh Unit



Sitarganj
Uttarakhand Unit

KARAM has the largest fully vertically integrated manufacturing set up in the world, manufacturing all the components of its entire range of products, from basic raw material, all in-house. Operations at KARAM are performed using the best practices in manufacturing like Six Sigma, Gemba (the real place), KAIZEN (Continuous Improvement), Poka- Yoke (Error Proofing) etc. With the commitment to sustain these practices in manufacturing, KARAM has been consistently winning the IMEA Award in the field of Manufacturing Excellence organized by Frost and Sullivan and FICCI since the year 2017. Along with sustainability of these practices, Operations at KARAM are under constant vigilance and are continually improvised each day, involving better processes and technology at all steps.

KARAM has the finest and best in-class state of the art machinery along with extremely skilled manpower involved in critical operation to produce the best quality safety gear from head to toe.

Our Quality lab has also been accredited by the Australian body to provide AS NZ certification.

Constant enhancement in technology and focused attention towards providing the highest quality products has enabled KARAM to establish itself as a leading player in the field of PPE.



Laser Cut Machine



CNC Turning and CNC Vertical



Hot Forging



ED Anodizing Plant



Effluent Treatment Plant



Webbing Cutting Section



Kernmantle Rope Making



Cold Stamping



Retractable Block Assembly Line



Automatic Electric Anodizing



Heat Treatment



Robotic Operations



Wire Rope Assembly



Automatic Electro Galvanizing



Product Design and Development



Twisted Rope Making



Ear Plug Production



Welding Shield Assembly Line



Mask Production



Safety Eyewear Production



Helmet Molding



Safety Shoe Production



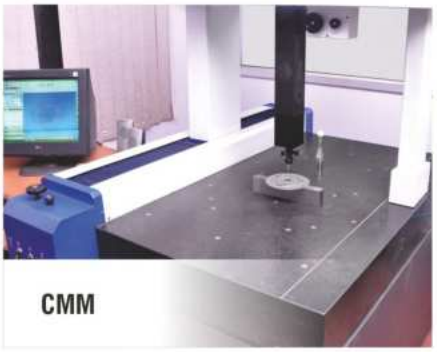
Packaging

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 materials as well as semi finished goods at KARAM also pass through stringent quality checks 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, ANSI or any other globally recognised Quality Standard.



Gate Strength Testing



CMM



2D Measuring



Dynamic Performance Testing



Dynamic Performance Testing



Harness Static Load Testing



Proof Load Testing



Hardness Testing



Salt Spray Testing



Spectra Photo Meter Test



Static Load Testing



100% Visual Inspection



Chemical Analysis

At KARAM, we are committed to expanding our Intellectual Property portfolio through continuous innovation and relentlessly pushing the boundaries of what is possible in the world of occupational safety solutions.

With a focus on excellence, collaboration, and cutting-edge technology, we are dedicated to making a positive impact on the future of safety.

138 Global Trademarks

5 Copyrights

23 Registered Designs

4 Patents Granted

8 Patents Pending

Exporting Solutions to over 100 Countries



India's No. 1 brand in PPE and Fall Protection

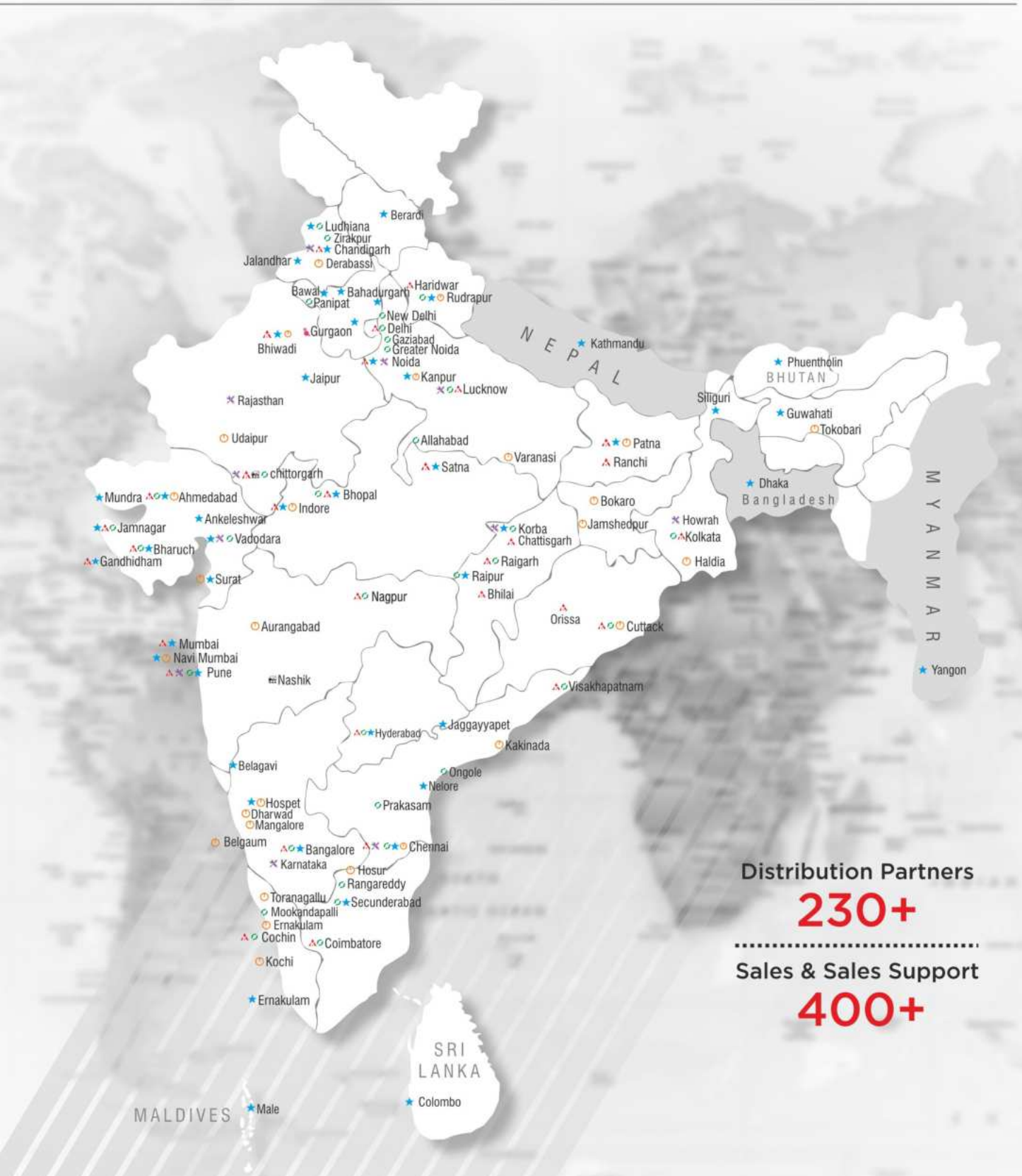
Asia's No. 1 brand in Fall Protection

Amongst **Top 3 Global** brands in Fall Protection

Our Competitive Edge

- Vertical Integration
- Customer Focused
- Innovations
- Superior Quality

Our PRESENCE



Distribution Partners

230+

Sales & Sales Support

400+

- KARAM Offices
- Channel Partners
- Dealers
- Retailers
- Project Associates
- Project Partners
- KARAM Authorised Service Centers
- Training Partners

Quality Management Systems Certification (ISO:9001:2015)

KARAM Quality Management System is Certified as per ISO : 9001 : 2015, by SGS-Finland

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

Product Certification (CE)

Around 3500 products manufactured by KARAM are certified.

Our certificates have been issued by Certifying Body SATRA, Apave and Dolomiticert, in accordance module B with Regulation (EU) 2016/425.

Our on-going assessment body is SGS-Finland which issues us our module D certificate as per directive Regulation (EU) 2016/425. The notified body number of SGS is 0598.

As per module D certificate all products marked CE 0598 must have a valid E.U. type examination certificate issued under module B.

Category I

Classification: Minor Risk
Technical file of the PPE Declaration of conformity User instruction CE marking

Category II

Classification: Intermediate Risk
Category I: EU type examination by a Notified Body (module B)

Category III

Classification: Mortal Risks or Irreversible
Category II: Annual PPE surveillance by a Notified Body (Module C2 or D) Affix the number of the Notified Body on the marking

EN 361	Full Body Harnesses
EN 813	Sit Harnesses
EN 12277	Mountaineering Harnesses
EN 1498	Rescue Loops
EN 358	Lanyards
EN 354	Lanyards
EN 362	Hooks and Karabiners
EN 12275	Mountaineering Karabiners
EN 355	Energy Absorbers
EN 795	Anchorage Devices
EN 353-1	Guided type Fall Arrester including a Rigid Anchorage Line
EN 353-2	Guided type Fall Arrester including a Flexible Anchorage Line
EN 360	Retractable type Fall Arresters
EN 1496	Rescue Lifting Devices
EN 341 & EN 12841	Descender Devices for Rescue
EN 566	Mountaineering Slings
EN 1497	Rescue Harnesses
EN 1263-1	Safety Fan Net
EN 812	Bump Cap

EN 516	Walkways
EN IEC 60079	Portable Single Gas Detectors
EN 397 ANSI Z89.1	Safety Helmets
EN 166 ANSI Z87.1	Safety Spectacles
EN 175	Welding Shields
EN 166 ANSI Z87.1	Face Shields
EN 149	FFP1,FFP2, FFP3 Disposable Respirators
EN 352-1	Ear Muffs
EN 352-2	Ear Plugs
EN 388	Hand Protection
EN 20345	Safety Shoes
IS 2925	Safety Helmets
IS 9473	FFP1, FFP2, FFP3 Disposable Respirators
IS 16289	Class 3 Surgical 3 Ply Masks
IS 15298	Safety Shoes
IS 9167	Ear Muffs & Ear Plugs
IS 3521	Full Body Harnesses, Energy Absorbing Lanyards, Fall Arrester Blocks, Vertical Lifelines, Horizontal Lifelines, Anchorages, Hooks & Connectors

CERTIFICATIONS


SATRA

EU Type-Examination Certificate

Certificate number: 27777/18715-01/00-00


SGS

PN International Pvt. Ltd.

IAF


Technická inšpekcia, a.s.

TYPE EXAMINATION CERTIFICATE


DOLOMITICERT

Italian Institute for the Certification of Personal Protective Equipment
S.C.A.R.L.
EU Notified Body n. 2008

COMPLIANCE OF CONFORMITY
number 170544

Verifications for anchor devices according to the Standard EN 795:2012
"Personal fall protection equipment – Anchor devices"

Anchor device
Model:
Davit Arm


SGS

PN International Trading as Karam

Regulation (EU) 2016/425


SAFETY LABEL
CERTIFICATE 2023

The UIAA certifies that the product named below has been tested to meet the safety requirements of the UIAA's equipment standards:

Product name	Aluminium scaffold hook
Product number	PN 136
Safety Label Holder	PN International Private limited (0222)
Brand name	KARAM
UIAA Standard	121 Carabiners_UIAA 121
Certificate No.	863 22-KRM
Date first issued	01.01.2023
Date last issued	01.01.2023

This certificate is valid until 31 Dec of the year of last issued date. It may be renewed within three months of the expiry date in accordance with UIAA regulations.

*All certificates can be verified on the UIAA website
http://www.theuiaa.org/safety-standards/certified-equipment/

International Climbing and Mountaineering Federation
UIAA


SGS

Karam Safety Private Limited

ISO 9001:2015

IAF

UKAS


Certificate of test

SATRA


SGS

Karam Safety Private Limited

Regulation (EU) 2016/425

FINAS


SATRA

EU Type-Examination Certificate

Certificate number: 27777/13891-02/00-00


MODULE B - EU TYPE-EXAMINATION CERTIFICATE EXTENSION

GÉPTESZT Kft.
ÉVE Tanúsító Szervezet
NB 2233
1037 Budapest, Jablonka u. 78.


intertek

KARAM SAFETY
PRIVATE LIMITED
Test Report

SCOPE OF WORK
Industrial Hard Hat (ANSI) Testing, brand name Karam Safety Private Limited, model PN 573

REPORT NUMBER
105.17680CRT-001

ISSUE DATE
5/20/2022

PAGES
8

DOCUMENT CONTROL NUMBER
GFT-OP-126 (6-July-2017)
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bsi.

Verification

Karam Safety Private Limited
C-30, 6, Phase III,
E.S.I.P., Sitarganj
Uttarakhand
262405

Verification Number: BHL 751701

...making excellence a habit.



TRAINING PARTNERS

Technical Rope And Rescue ASIA

irata International Industrial Rope Access Trade Association MEMBER

GWO GLOBAL WIND ORGANISATION

GREEN TRIANGLE FOR SAFETY National Safety Council

KARAM® MOBILE DEMO VAN

KARAM is committed to redefining safety practices by making them both accessible and practical for everyone. To achieve this goal, KARAM has deployed three state-of-the-art Mobile Demo Vans across various locations in India, bringing safety education to the forefront. These vans enable our end users, especially workers, to engage with and understand the importance of personal protective equipment (PPE) and fall protection solutions. This initiative goes beyond merely showcasing products; it empowers workers with the knowledge and proper usage of safety gear to foster safer environments. With hands-on demonstrations and expert guidance, KARAM is dedicated to promoting a culture of safety that knows no boundaries.

- **Hands-on Experience**
- **Real-Time Consultation**
- **Enhanced Awareness**
- **Time and Cost Efficiency**





What does KARAM Authorized Service Centres do?

KARAM Authorised Service Centres have been established all over India to increase the reach and to provide convenient after-sales services to our valuable customers which includes:

- Inspection and revalidation of Personal Protective Equipment (PPE)
- Service and Repair of Retractable Fall Arrestor Blocks
- Inspection, repair, and revalidation of Fixed Line Systems (FLS)

Benefits of Inspection:

- Ensures the product efficacy.
- Ensures that all parts of the product are intact and functional.
- Detects the visible damages.
- Identifies if a product may be nearing its expiration date.
- Regular maintenance ensures the effectiveness of PPE and provides protection to the user against any risk or injuries

As per EN 365:2004 and IS 3521:2021 of PPE Directives, PPE needs to be inspected every 12 months (from the date of first use) by a competent person appropriately authorized by the manufacturer.

To ensure that all KARAM products are inspected and serviced efficiently, we have 15 KARE Centres located in different cities across India

HRO : Vijayawada • **ARO** : Rajasthan • **ARO** : Chittorgarh • **BRO** : Karnataka • **CRO** : Chennai
ARO : Vadodara • **MRO** : Pune • **DRO** : Noida • **LRO** : Lucknow • **KRO** : Howrah • **CHRO** : Chandigarh
• **CTRO** : Korba

EMBRACING GREEN MANUFACTURING

WHERE SAFETY MEETS A SUSTAINABLE TOMORROW



As a continuation of our commitment to quality and sustainability, we're excited to announce that all metal parts now feature a superior silver passivation finish.

Why Silver Passivation?

Improved Corrosion Protection : Our new finish provides exceptional protection against rust and corrosion, even in harsh environments.

Superior Uniformity : Silver passivation delivers a more consistent and aesthetically pleasing finish.

Environmentally Friendly : This process is RoHS compliant, reducing our environmental impact.

Key Benefits:

Extended Product Lifespan : Enjoy products that last longer, reducing waste and minimizing the need for replacements.

Enhanced Performance : Benefit from improved durability and corrosion resistance, ensuring optimal product function.

Improved Aesthetics : The silver finish offers a more modern and sophisticated look that sets your products apart.

KARAM'S ESG EFFORTS

Founded with a vision of saving lives, KARAM has expanded its commitment to include environmental, social, and governance (ESG) initiatives. We strive to create a positive impact on our communities and the planet through ethical business practices, sustainable operations, and a focus on social well-being.



ENVIRONMENTAL STEWARDSHIP

KARAM is committed to protecting the environment through initiatives like tree plantation drives, natural resource management, and renewable energy harnessing.

HEALTHCARE INITIATIVES

KARAM is dedicated to enhancing healthcare access and supporting underserved communities. We have partnered with renowned NGOs like Ankur Foundation, Koshika Foundation, and the Thalassemics India Society to expand healthcare services and provide essential treatments. These collaborations demonstrate our commitment to improving the health and well-being of individuals and communities.





EDUCATIONAL INITIATIVES

Our volunteers actively engage with NGOs in Lucknow, conducting activities, sharing inspiring stories, and distributing school supplies.

SPORTS INITIATIVES

KARAM supports young athletes through sponsorships and initiatives that foster sportsmanship and excellence.





GOVERNANCE

We prioritize ethical practices, transparency, and accountability in our operations. Our commitment to strong corporate governance is reflected in our adherence to the KARAM Kore values and our Integrated Management System (IMS) policies. These frameworks ensure compliance and integrity throughout our operations.

Through these initiatives, KARAM demonstrates its dedication to sustainability, social responsibility, and ethical business practices. We are committed to creating a positive impact on our communities and the planet.

RESPIRATORY PROTEKTION

KARAM



Presenting the range of Face Respirators, including Surgical Masks, Cup Shape, Fish Shape, and Flat Fold Disposable series, along with specialized Welder's and Painter's Respirators. These products are ideal for various daily applications and are certified in accordance with IS 9473:2002, EN 149:2001+A1:2009, and are CDSCO registered.

Scan here *for a virtual tour of the product*

Standards at a Glance

KARAM

IS 9473:2002, EN 149:2001 - RESPIRATORY PROTECTIVE DEVICES FILTERING HALF MASKS

Provides protection against, air contaminants, viruses, bacterial, micro-organisms, dust, pollen and smoke.

Filtering facepiece serve to protect against particulates such as dust particles, droplets, and aerosols. These standard defines three classes of filtering efficiency, namely FFP1, FFP2 and FFP3.

Requirements: All Respirators certified to IS 9473:2002 and EN149:2001 must meet these requirements:

1. Material and construction
2. Practical Performance Test
   - Cleaning and disinfecting
   - Security of fastenings
3. Leakage
   - Total Inward leakage
   - Penetration of filter material
4. Compatibility with skin
5. Flammability
6. Carbon Dioxide content of the inhalation air
7. Head harness
8. Field of vision
9. Inhalation and Exhalation Valves testing
10. Breathing Resistance
11. Clogging
    - Breathing Resistance after clogging
    - Valved filtering half masks
    - Filter Penetration
12. Visual inspection

KARAM Disposable Face Respirators are CDSCO registered.

In addition to ISI certification, KARAM Disposable Face Respirators are now CDSCO registered.

This means that KARAM is one of the few manufacturers registered with CDSCO for manufacturing of Face Masks.

Abiding by these rules, KARAM provides the assurance of the best quality, safety and performance of its face masks.

CDSCO is the National Regulatory Authority (NRA) of India which is responsible for regulating the registration & sale of genuine medical devices.

KARAM firmly believes in delivering the uncompromised, best quality product and services to its user base . To protect the users against the misleading information and malicious effects of counterfeit/inferior quality masks, KARAM has joined the government drive and promised to deliver ensure maximum safety to all its users by putting compliance as a priority.



BREATHING RESISTANCE TEST



PARTICULATE FILTERING EFFICIENCY TEST

Testing

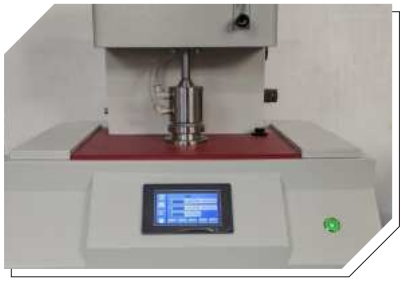
TESTED & CERTIFIED

IS 9473:2002

CM/L-8300137209



DOLOMITE DUST CLOGGING TEST



EXHALATION VALVE LEAKAGE TEST

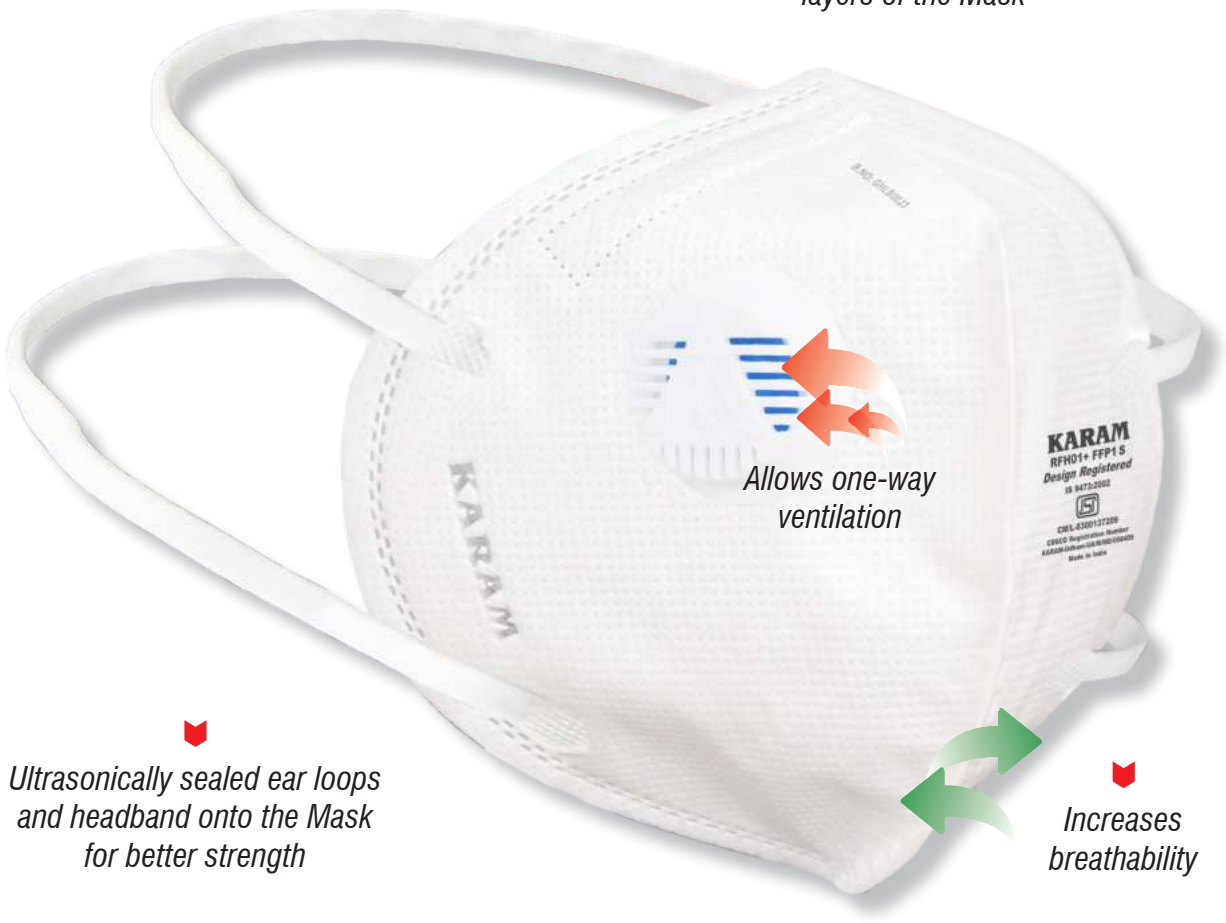
PRESENTING THE SELECT SERIES AND PRIME SERIES FACE RESPIRATORS

Designed for comfort and reliability, our FFP1, FFP2, and FFP3 models are the perfect choice for upto 12 cumulative hours of use across diverse industries. These respirators combine advanced filtration technology with ergonomic design, ensuring optimal protection and breathability for every application. Experience enhanced safety and comfort with our Select and Prime Series, tailored to meet the demands of your workplace.

FEATURES LIKE NEVER BEFORE!

Soft and easily adjustable headband / ear loop

Ultrasonically sealed metal-reinforced flexible plastic nose-clip within the layers of the Mask

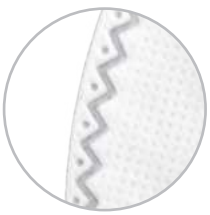


Allows one-way ventilation

Ultrasonically sealed ear loops and headband onto the Mask for better strength

Increases breathability

Unique design for full face coverage down to the chin that exerts uniform pressure all across the facial contour



**Comes with a catchy zig-zag pattern on the edge*



Soft and light weight material for uncompromised protection

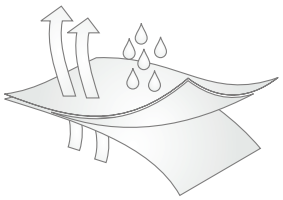


Every Mask comes with batch number/ lot number details for complete transparency with the user

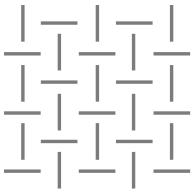


Fully sterilized before being packaged

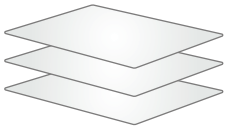
UNIQUE FEATURES OF FABRIC



*Made of **Non-woven Highly Breathable Polypropylene** material*



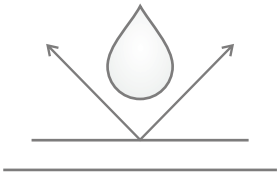
***Ultra Soft Fabric** for superior comfort over prolonged usage*



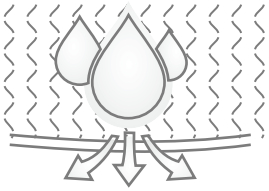
***Multi-Layer Protection** Filters contaminants like dust, particulate matter, viruses, bacteria and other micro-organisms*



***Electrostatically Charged Filter** for enhanced filtering efficiency*

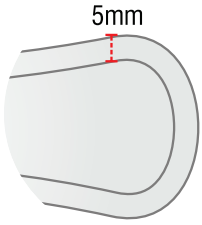


***Water Repellent** outer layer ensuring that the mask does not soak when in contact with a few drops of water*

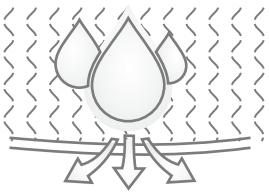


***Sweat Absorbent** innermost layer for utmost comfort during prolonged usage*

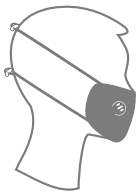
UNIQUE FEATURES OF EAR LOOP/HEADBAND



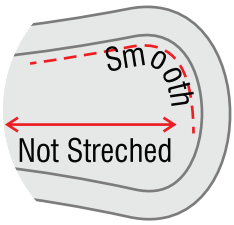
***Hypoallergenic Elasticated Material** of 5mm width that does not cause allergies*



Soft, Latex-free** and **Sweat Absorbent

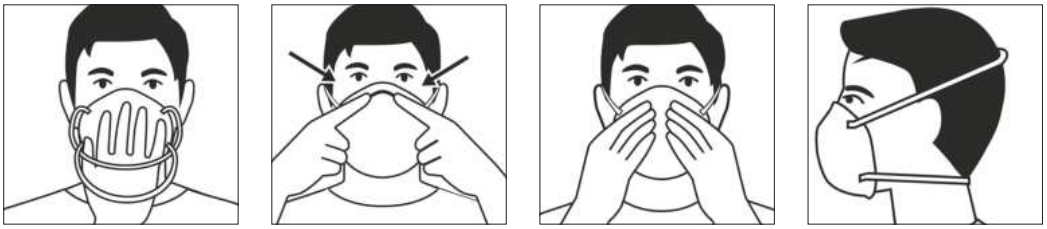


One size fits all



Does not stretch even after prolonged usage

STEPS TO WEAR THE FACE RESPIRATOR



SELECT Series
FFP1 S

IS 9473:2002

CM/L-8300137209

DISPOSABLE FACE RESPIRATOR WITH EAR LOOPS
Ref. RF 01



DISPOSABLE FACE RESPIRATOR WITH EAR LOOPS AND EXHALATION VALVE
Ref. RF 01+



*Available in colors:

PERFORMANCE REQUIREMENTS TESTED AS PER VARIOUS CLAUSES OF IS 9473:2002

Vital Test	Requirement as per Standard	RF 01	RF 01+
Particulate Filtering Efficiency	Requirement as per standard- 80%	**Exceeds 90%**	**Exceeds 90%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.6 mbar • Inhalation Flow- 95 l/min: Should be less than 2.1 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.4 mbar** • **1.7 mbar** • **2.4 mbar**	• **0.3 mbar** • **1.4 mbar** • **1.2 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 22% • The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 25%	• **3.36%** • **9.36%**	• **2.89%** • **6.58%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.5%**	**< 0.4%**
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flam**	
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 90%**	

Based on approximate values

**Note- It is not recommended to wash a disposable Face Respirator as this damages it and lowers its filtering efficiency.*

SELECT Series
FFP1 S

IS 9473:2002

CM/L-8300137209

DISPOSABLE FACE RESPIRATOR WITH HEADBAND
Ref. RFH 01



DISPOSABLE FACE RESPIRATOR WITH HEADBAND AND EXHALATION VALVE
Ref. RFH 01+



*Available in colors:

PERFORMANCE REQUIREMENTS TESTED AS PER VARIOUS CLAUSES OF IS 9473:2002

Vital Test	Requirement as per Standard	RFH 01	RFH 01+
Particulate Filtering Efficiency	Requirement as per standard- 80%	**Exceeds 90%**	**Exceeds 90%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.6 mbar • Inhalation Flow- 95 l/min: Should be less than 2.1 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.3 mbar** • **1.5 mbar** • **1.9 mbar**	• **0.4 mbar** • **1.2 mbar** • **1.2 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 22% • The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 25%	• **2.44%** • **7.08%**	• **2.78%** • **3.58%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.5%**	**< 0.4%**
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flam**	
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 90%**	

Based on approximate values

**Note- It is not recommended to wash a disposable Face Respirator as this damages it and lowers its filtering efficiency.*

SELECT Series
FFP1 S

IS 9473:2002

CM/L-8300137209

DISPOSABLE FACE RESPIRATOR WITH HEADBAND
Ref. RFH 10



*Available in colors:

PERFORMANCE REQUIREMENTS TESTED AS PER VARIOUS CLAUSES OF IS 9473:2002 :

Vital Test	Requirement as per Standard	KARAM Mask
Particulate Filtering Efficiency	Requirement as per standard- 80%	**Exceeds 90%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.6 mbar • Inhalation Flow- 95 l/min: Should be less than 2.1 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.3 mbar** • **1.5 mbar** • **1.9 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 22% • The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 25%	• **2.44%** • **7.08%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.5%**
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flam**
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 90%**

Based on approximate values

**Note- It is not recommended to wash a disposable Face Respirator as this damages it and lowers its filtering efficiency.*

SELECT Series
FFP2 SL

IS 9473:2002

CM/L-8300137209

DISPOSABLE FACE RESPIRATOR WITH EAR LOOPS
Ref. RF 02



DISPOSABLE FACE RESPIRATOR WITH EAR LOOPS AND EXHALATION VALVE
Ref. RF 02+



*Available in colors:

PERFORMANCE REQUIREMENTS TESTED AS PER VARIOUS CLAUSES OF IS 9473:2002

Vital Test	Requirement as per Standard	RF 02	RF 02+
Particulate Filtering Efficiency	Requirement as per standard- 94%	**Exceeds 97%**	**Exceeds 97%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.7 mbar • Inhalation Flow- 95 l/min: Should be less than 2.4 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.4 mbar** • **1.6 mbar** • **2.1 mbar**	• **0.3 mbar** • **1.3 mbar** • **1.2 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 8% • The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 11%	• **2.05%** • **6.31%**	• **2.56%** • **7.26%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.6%**	**< 0.4%**
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flam**	
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 99%**	

Based on approximate values

**Note- It is not recommended to wash a disposable Face Respirator as this damages it and lowers its filtering efficiency.*

SELECT Series
FFP2 SL

IS 9473:2002

CM/L-8300137209

DISPOSABLE FACE RESPIRATOR WITH HEADBAND
Ref. RFH 02



DISPOSABLE FACE RESPIRATOR WITH HEADBAND AND EXHALATION VALVE
Ref. RFH 02+



*Available in colors:

PERFORMANCE REQUIREMENTS TESTED AS PER VARIOUS CLAUSES OF IS 9473:2002

Vital Test	Requirement as per Standard	RFH 02	RFH 02+
Particulate Filtering Efficiency	Requirement as per standard- 94%	**Exceeds 97%**	**Exceeds 97%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.7 mbar • Inhalation Flow- 95 l/min: Should be less than 2.4 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.3 mbar** • **1.5 mbar** • **1.8 mbar**	• **0.3 mbar** • **1.4 mbar** • **1.2 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 8% • The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 11%	• **2.04%** • **6.31%**	• **2.76%** • **3.68%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.6%**	**< 0.5%**
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flam**	
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 99%**	

Based on approximate values

**Note- It is not recommended to wash a disposable Face Respirator as this damages it and lowers its filtering efficiency.*

SELECT Series
FFP2 SL

IS 9473:2002

CM/L-8300137209

DISPOSABLE FACE RESPIRATOR WITH HEADBAND
Ref. RFH 20



*Available in colors:

PERFORMANCE REQUIREMENTS TESTED AS PER VARIOUS CLAUSES OF IS 9473:2002 :

Vital Test	Requirement as per Standard	KARAM Mask
Particulate Filtering Efficiency	Requirement as per standard- 94%	**Exceeds 97%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.7 mbar • Inhalation Flow- 95 l/min: Should be less than 2.4 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.3 mbar** • **1.5 mbar** • **1.8 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 8% • The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 11%	• **2.04%** • **6.31%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.6%**
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flame**
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 99%**

Based on approximate values

**Note- It is not recommended to wash a disposable Face Respirator as this damages it and lowers its filtering efficiency.*

PRIME SERIES

FFP1S NR D

EN 149:2001+A1:2009

IS 9473:2002

CM/L-8300137209

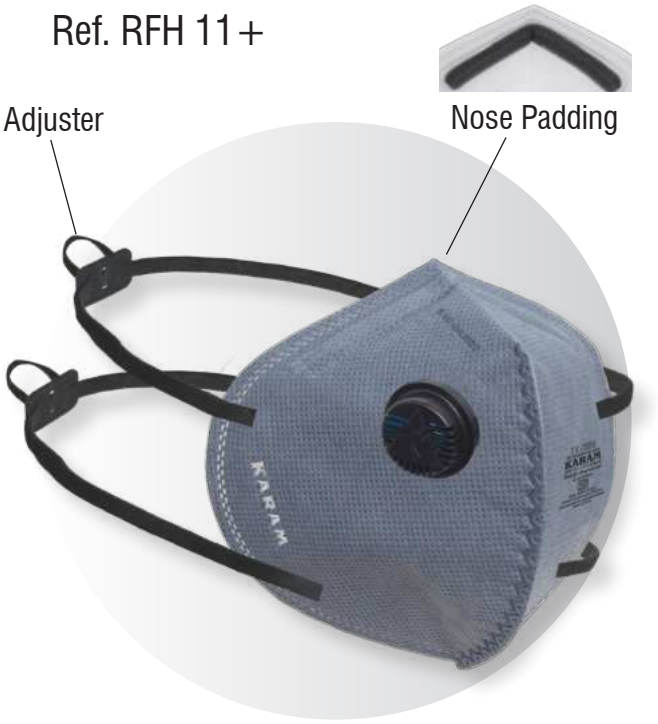
DISPOSABLE FACE RESPIRATOR WITH HEADBAND

Ref. RFH 11



DISPOSABLE FACE RESPIRATOR WITH HEADBAND AND EXHALATION VALVE

Ref. RFH 11+



*Available in colors:

PERFORMANCE REQUIREMENTS TESTED AS PER VARIOUS CLAUSES OF IS 9473:2002, EN 149:2001+A1:2009 :

Vital Test	Requirement as per Standard	RFH 11	RFH 11+
Particulate Filtering Efficiency	Requirement as per standard- 80%	**Exceeds 90%**	**Exceeds 90%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.6 mbar • Inhalation Flow- 95 l/min: Should be less than 2.1 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.3 mbar** • **1.5 mbar** • **1.9 mbar**	• **0.4 mbar** • **1.2 mbar** • **1.2 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 22% • The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 25%	• **2.44%** • **7.08%**	• **2.78%** • **3.58%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.5%**	**< 0.4%**
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flam**	
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 99%**	

Based on approximate values

**Note- It is not recommended to wash a disposable Face Respirator as this damages it and lowers its filtering efficiency.*

PRIME SERIES

FFP2 SL NR D

EN 149:2001+A1:2009

CDSCO

IS 9473:2002

CM/L-8300137209

DISPOSABLE FACE RESPIRATOR WITH HEADBAND

Ref. RFH 12



DISPOSABLE FACE RESPIRATOR WITH HEADBAND AND EXHALATION VALVE

Ref. RFH 12+



*Available in colors:

PERFORMANCE REQUIREMENTS TESTED AS PER VARIOUS CLAUSES OF IS 9473:2002, EN 149:2001+A1:2009 :

Vital Test	Requirement as per Standard	RFH 12	RFH 12+
Particulate Filtering Efficiency	Requirement as per standard- 94%	**Exceeds 97%**	**Exceeds 97%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.7 mbar • Inhalation Flow- 95 l/min: Should be less than 2.4 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.3 mbar** • **1.5 mbar** • **1.8 mbar**	• **0.3 mbar** • **1.4 mbar** • **1.2 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 8% • The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 11%	• **2.04%** • **6.31%**	• **2.76%** • **3.28%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.6%**	**< 0.5%**
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flam**	
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 99%**	

Based on approximate values

**Note- It is not recommended to wash a disposable Face Respirator as this damages it and lowers its filtering efficiency.*

PRIME SERIES

FFP3 SL NR D

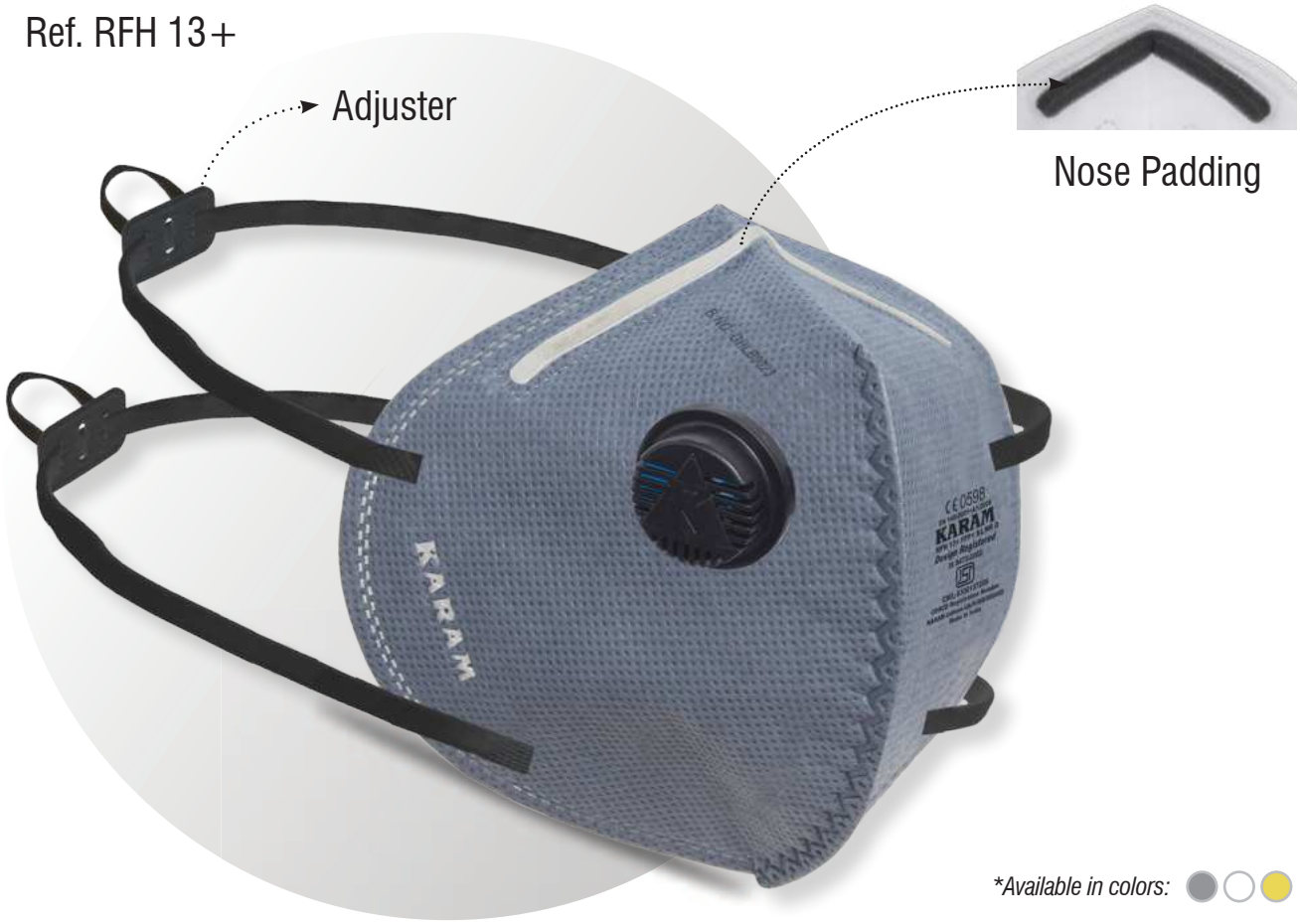
EN 149:2001+A1:2009

IS 9473:2002

CM/L-8300137209

DISPOSABLE FACE RESPIRATOR WITH HEADBAND AND EXHALATION VALVE

Ref. RFH 13+



*Available in colors:

PERFORMANCE REQUIREMENTS TESTED AS PER VARIOUS CLAUSES OF IS 9473:2002, EN 149:2001+A1:2009 :

Vital Test	Requirement as per Standard	KARAM Mask
Particulate Filtering Efficiency	Requirement as per standard- 94%	**Exceeds 99%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.7 mbar • Inhalation Flow- 95 l/min: Should be less than 2.4 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.7 mbar** • **2.4 mbar** • **2.6 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 8% • The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 11%	• **5.0%** • **2.0%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.6%**
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flame**
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 99%**

Based on approximate values

**Note- It is not recommended to wash a disposable Face Respirator as this damages it and lowers its filtering efficiency.*

NEW

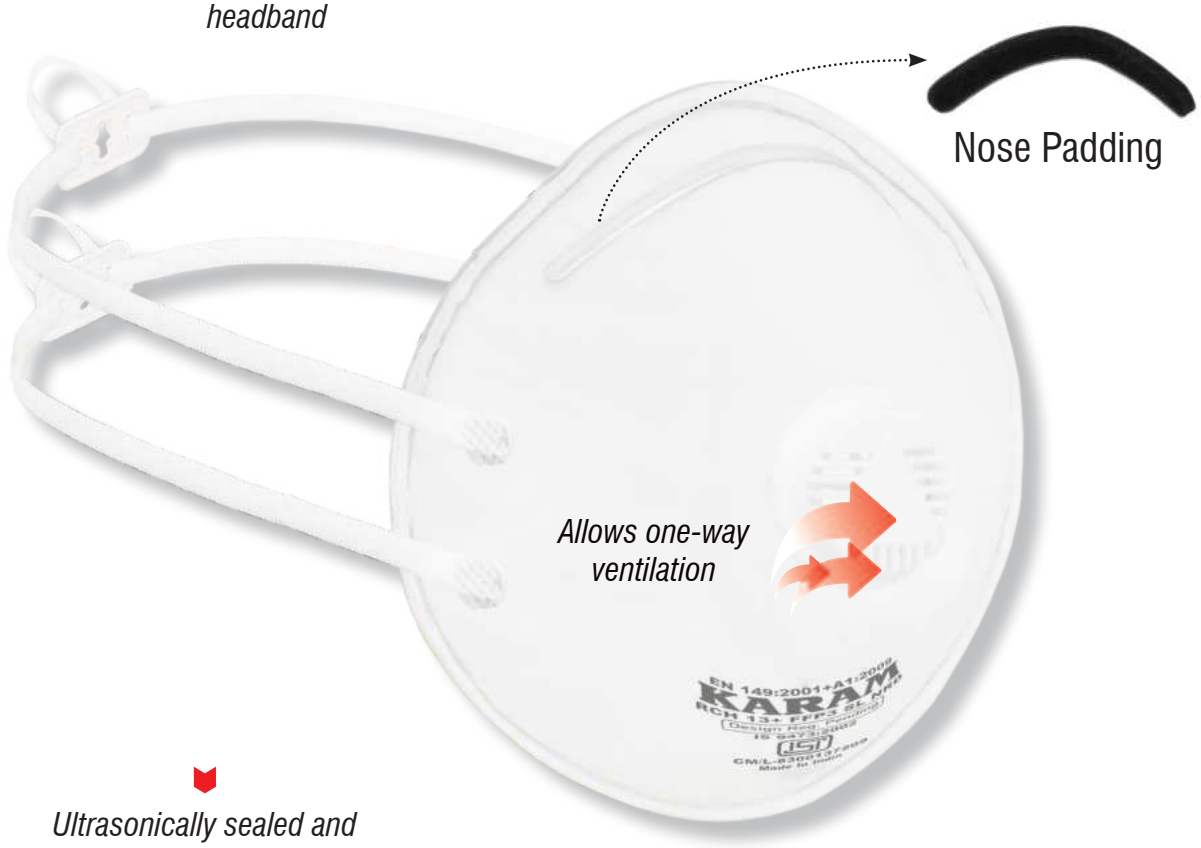
DISPOSABLE CUP SHAPE RESPIRATORS

KARAM introduces the range of FFP1, FFP2, FFP3 series of Cup Shape Respirators with comfortable headband designed to filter air contaminants, viruses, bacterial micro-organisms, water and oil based aerosols, dust, pollen and smoke. Allows the user to breathe easy and germ free.

FEATURES LIKE NEVER BEFORE!

Soft and easily adjustable headband

External adjustable aluminium nose-clip with better sealing



Ultrasonically sealed and headband onto the Mask for better strength

Unique design for full face coverage down to the chin that exerts uniform pressure all across the facial contour



Water repellent outer layer



Sweat absorbent inner layer



Non-woven polypropylene needle punch fabric which gives perfect cup shape to the mask

SELECT Series
FFP1S

IS 9473:2002

CM/L-8300137209

DISPOSABLE CUP SHAPE RESPIRATOR WITH HEADBAND AND EXHALATION VALVE
Ref. RCH 01+



DISPOSABLE CUP SHAPE RESPIRATOR WITH HEADBAND
Ref. RCH 01



**Available in colors:*

**Available in sizes: S-M, L-XL*

PERFORMANCE REQUIREMENTS TESTED AS PER IS 9473:2002 :-

Vital Test	Requirement as per Standard	RCH 01+	RCH 01
Particulate Filtering Efficiency	Requirement as per standard- 80%	**Exceeds 90%**	**Exceeds 90%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.6 mbar • Inhalation Flow- 95 l/min: Should be less than 2.1 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.3 mbar** • **1.2 mbar** • **1.2 mbar**	• **0.3 mbar** • **1.2 mbar** • **1.9 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 22% • The total inward leakage of all 50 subjects against the requirement of atleast 46 subjects should not be greater than 25%	• **10.78%** • **12.58%**	• **10.44%** • **12.08%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.4%**	**< 0.6%**
Flammability	The Face Respirator when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flame**	
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 90%**	

**Note- The above figures are based upon the approximate values.*

SELECT Series
FFP2 SL

IS 9473:2002

CM/L-8300137209

DISPOSABLE CUP SHAPE RESPIRATOR WITH HEADBAND AND EXHALATION VALVE
Ref. RCH 02+



DISPOSABLE CUP SHAPE RESPIRATOR WITH HEADBAND
Ref. RCH 02



**Available in colors:*

**Available in sizes: S-M, L-XL*

PERFORMANCE REQUIREMENTS TESTED AS PER IS 9473:2002 :-

Vital Test	Requirement as per Standard	RCH 02+	RCH 02
Particulate Filtering Efficiency	Requirement as per standard- 94%	**Exceeds 97%**	**Exceeds 97%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.7 mbar • Inhalation Flow- 95 l/min: Should be less than 2.4 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.3 mbar** • **1.4 mbar** • **1.2 mbar**	• **0.3 mbar** • **1.5 mbar** • **1.8 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 8% • The total inward leakage of all 50 subjects against the requirement of atleast 46 subjects should not be greater than 11%	• **4.76%** • **6.28%**	• **4.04%** • **6.31%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.5%**	**< 0.6%**
Flammability	The Face Respirator when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flame**	
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 98%**	

**Note- The above figures are based upon the approximate values.*

PRIME SERIES

FFP1 S NR D

IS 9473:2002

CM/L-8300137209

DISPOSABLE CUP SHAPE RESPIRATOR WITH HEADBAND AND EXHALATION VALVE

Ref. RCH 11+



DISPOSABLE CUP SHAPE RESPIRATOR WITH HEADBAND

Ref. RCH 11



**Available in colors:*

**Available in sizes: S-M, L-XL*

PERFORMANCE REQUIREMENTS TESTED AS PER IS 9473:2002 :-

Vital Test	Requirement as per Standard	RCH 11+	RCH 11
Particulate Filtering Efficiency	Requirement as per standard- 80%	**Exceeds 90%**	**Exceeds 90%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.6 mbar • Inhalation Flow- 95 l/min: Should be less than 2.1 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.4 mbar** • **1.2 mbar** • **1.2 mbar**	• **0.3 mbar** • **1.5 mbar** • **1.9 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 22% • The total inward leakage of all 50 subjects against the requirement of atleast 46 subjects should not be greater than 25%	• **10.78%** • **12.58%**	• **10.44%** • **12.08%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.4%**	**< 0.5%**
Flammability	The Face Respirator when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flame**	
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 90%**	

**Note- The above figures are based upon the approximate values.*

PRIME SERIES

FFP2 SL NR D

IS 9473:2002

CM/L-8300137209

DISPOSABLE CUP SHAPE RESPIRATOR WITH HEADBAND AND EXHALATION VALVE

Ref. RCH 12+



DISPOSABLE CUP SHAPE RESPIRATOR WITH HEADBAND

Ref. RCH 12



**Available in colors:*

**Available in sizes: S-M, L-XL*

CE

EN 149:2001+A1:2009

PERFORMANCE REQUIREMENTS TESTED AS PER IS 9473:2002 :-

Vital Test	Requirement as per Standard	RCH 12+	RCH 12
Particulate Filtering Efficiency	Requirement as per standard- 94%	**Exceeds 97%**	**Exceeds 97%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.7 mbar • Inhalation Flow- 95 l/min: Should be less than 2.4 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.3 mbar** • **1.5 mbar** • **1.2 mbar**	• **0.3 mbar** • **1.5 mbar** • **1.8 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 8% • The total inward leakage of all 50 subjects against the requirement of atleast 46 subjects should not be greater than 11%	• **4.76%** • **6.28%**	• **4.04%** • **6.31%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.5%**	**< 0.6%**
Flammability	The Face Respirator when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flame**	
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 98%**	

**Note- The above figures are based upon the approximate values.*

PRIME SERIES

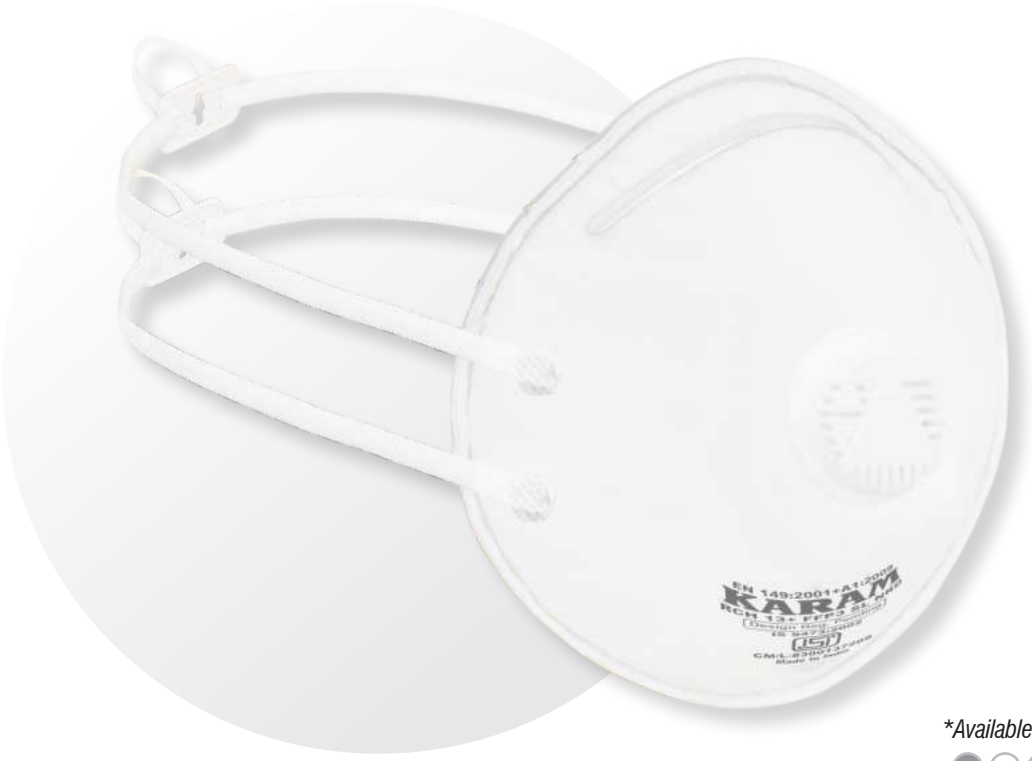
FFP3 SL NR D

IS 9473:2002

CM/L-8300137209

DISPOSABLE CUP SHAPE RESPIRATOR WITH HEADBAND AND EXHALATION VALVE

Ref. RCH 13+



*Available in colors:

*Available in sizes: S-M, L-XL

PERFORMANCE REQUIREMENTS TESTED AS PER IS 9473:2002 :-

Vital Test	Requirement as per Standard	KARAM Respirator
Particulate Filtering Efficiency	Requirement as per standard- 99%	**Exceeds 99%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 1.0 mbar • Inhalation Flow- 95 l/min: Should be less than 3.0 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.7 mbar** • **2.4 mbar** • **2.6 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 2% • The total inward leakage of all 50 subjects against the requirement of atleast 46 subjects should not be greater than 5%	• **Less than 2%** • **Less than 5%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.6%**
Flammability	The Face Respirator when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Respirator does not continue to burn after removal of flame**
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 98%**

**Note- The above figures are based upon the approximate values.*

DISPOSABLE FISH TYPE RESPIRATORS

KARAM introduces the range of FFP1, FFP2 and FFP3 fish type respirators specially curated to offer added coverage and comfort

FEATURES LIKE NEVER BEFORE!

Soft and easily adjustable headband

Sweat absorbant inner layer for utmost comfort



Nose Padding



Allows one-way ventilation

Ultrasonically sealed headband onto the Respirator for better strength

Water repellent outer layer



Wide coverage



Multiple layers for maximum protection



Comfortable nose padding



Melt blown layer for filtration

FFP1S NR D

IS 9473:2002

CM/L-8300137209

DISPOSABLE FISH TYPE RESPIRATOR WITH HEADBAND AND EXHALATION VALVE
Ref. RFTH 11+



DISPOSABLE FISH TYPE RESPIRATOR WITH HEADBAND
Ref. RFTH 11



CE

EN 149:2001+A1:2009

PERFORMANCE REQUIREMENTS TESTED AS PER IS 9473:2002:

Vital Test	Requirement as per Standard	RFTH 11+	RFTH 11
Particulate Filtering Efficiency	Requirement as per standard- 80%	**Exceeds 90%**	**Exceeds 90%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.6 mbar • Inhalation Flow- 95 l/min: Should be less than 2.1 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.4 mbar** • **1.2 mbar** • **1.2 mbar**	• **0.3 mbar** • **1.5 mbar** • **1.9 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 22% • The total inward leakage of all 50 subjects against the requirement of atleast 46 subjects should not be greater than 25%	• **10.44%** • **12.08%**	• **10.44%** • **12.08%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.4%**	**< 0.5%**
Flammability	The Face Respirator when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flame**	
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 90%**	

**Note-The above figures are based upon the approximate values.*

FFP2 SL NR D

IS 9473:2002

CM/L-8300137209

DISPOSABLE FISH TYPE RESPIRATOR WITH HEADBAND AND EXHALATION VALVE
Ref. RFTH 12+



DISPOSABLE FISH TYPE RESPIRATOR WITH HEADBAND
Ref. RFTH 12



CE

EN 149:2001+A1:2009

PERFORMANCE REQUIREMENTS TESTED AS PER IS 9473:2002:

Vital Test	Requirement as per Standard	RFTH 12+	RFTH 12
Particulate Filtering Efficiency	Requirement as per standard- 94%	**Exceeds 97%**	**Exceeds 97%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.7 mbar • Inhalation Flow- 95 l/min: Should be less than 2.4 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.3 mbar** • **1.5 mbar** • **1.8 mbar**	• **0.3 mbar** • **1.4 mbar** • **2.0 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 8% • The total inward leakage of all 50 subjects against the requirement of atleast 46 subjects should not be greater than 11%	• **4.04%** • **6.28%**	• **4.44%** • **6.31%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.6%**	**< 0.4%**
Flammability	The Face Respirator when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Mask does not continue to burn after removal of flam**	
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 98%**	

**Note- The above figures are based upon the approximate values.*

FFP3 SL NR D

IS 9473:2002

CM/L-8300137209

DISPOSABLE FISH TYPE RESPIRATOR WITH HEADBAND AND EXHALATION VALVE

Ref. RFTH 13+



CE

EN 149:2001+A1:2009

PERFORMANCE REQUIREMENTS TESTED AS PER IS 9473:2002:

Vital Test	Requirement as per Standard	KARAM Respirator
Particulate Filtering Efficiency	Requirement as per standard- 99%	**Exceeds 99%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 1.0 mbar • Inhalation Flow- 95 l/min: Should be less than 3.0 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.7 mbar** • **2.4 mbar** • **2.6 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 2% • The total inward leakage of all 50 subjects against the requirement of atleast 46 subjects should not be greater than 5%	• **Less than 2%** • **Less than 5%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.6%**
Flammability	The Face Respirator when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Respirator does not continue to burn after removal of flame**
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 98%**

**Note- The above figures are based upon the approximate values.*

NEW

WELDING RESPIRATOR

Meet the new FFP2 NR D Disposable Welding Respirator for protection against sparks, welding fumes and flames, torch cutting, brazing and soldering jobs.

FEATURES LIKE NEVER BEFORE!

Soft and easily adjustable headband

Ultrasonically sealed metal-reinforced flexible plastic nose-clip within the layers of the Respirator



Ultrasonically sealed headband onto the respirator for better strength

Unique design for full face coverage down to the chin that exerts uniform pressure all across the facial contour



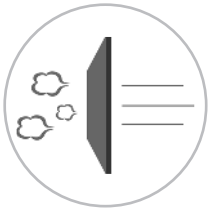
Protection against welding fumes, spatters, flash fire and smoke



Particulate filtration efficiency greater than 98%



Flame retardant outer layer for protection against flash fire hazards conforming to ASTM D 2859



Activated carbon non-woven fabric for protection against organic vapours

FFP2 NR D

IS 9473:2002
CM/L-8300137209

CE
EN 149:2001+A1:2009

DISPOSABLE WELDING RESPIRATOR WITH HEADBAND AND EXHALATION VALVE

Ref. RFH 32+ OV



PERFORMANCE REQUIREMENTS TESTED AS PER IS 9473:2002, EN 149:2001+A1:2009 :-

Vital Test	Requirement as per Standard	KARAM Respirator
Particulate Filtering Efficiency	Requirement as per standard- 94%	**Exceeds 98%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.7 mbar • Inhalation Flow- 95 l/min: Should be less than 2.4 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.5 mbar** • **2.1 mbar** • **2.6 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 8% • The total inward leakage of all 50 subjects against the requirement of atleast 46 subjects should not be greater than 11%	• **5.0%** • **6.0%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.6%**
Flammability	The Face Respirator when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Respirator does not continue to burn after removal of flame**
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 98%**

**Note- The above figures are based upon the approximate values.*

NEW

PAINTING RESPIRATOR

Meet the new FFP2 SL NR D Disposable Painter Respirator for safe breathing against oil, dust, air borne particles, paint spraying and solvents.

FEATURES LIKE NEVER BEFORE!

Soft and easily adjustable headband

Ultrasonically sealed metal-reinforced flexible plastic nose-clip within the layers of the respirator



Ultrasonically sealed headband onto the respirator for better strength

Unique design for full face coverage down to the chin that exerts uniform pressure all across the facial contour



Oil and water repellent outer layer



Activated carbon non-woven layer for protection against organic vapours



High technology filter media



Particulate filtration efficiency greater than 98%



Sweat absorbent inner layer

FFP2 SL NR D

IS 9473:2002
CM/L-8300137209

CE
EN 149:2001+A1:2009

DISPOSABLE PAINTING RESPIRATOR WITH HEADBAND AND EXHALATION VALVE

Ref. RFH 22+ OV



PERFORMANCE REQUIREMENTS TESTED AS PER IS 9473:2002, EN 149:2001+A1:2009 :-

Vital Test	Requirement as per Standard	KARAM Respirator
Particulate Filtering Efficiency	Requirement as per standard- 94%	**Exceeds 98%**
Breathing Resistance	• Inhalation Flow- 30 l/min: Should be less than 0.7 mbar • Inhalation Flow- 95 l/min: Should be less than 2.4 mbar • Exhalation Flow- 160 l/min: Should be less than 3.0 mbar	• **0.5 mbar** • **2.1 mbar** • **2.6 mbar**
Total Inward Leakage	• The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 8% • The total inward leakage of all 50 subjects against the requirement of atleast 46 subjects should not be greater than 11%	• **5.0%** • **6.0%**
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	**< 0.6%**
Flammability	The Face Respirator when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	**KARAM Respirator does not continue to burn after removal of flam**
Filtering Efficiency	Bacterial filtering efficiency should be >90%	**> 98%**

**Note- The above figures are based upon the approximate values.*

DISPOSABLE SURGICAL 3PLY FACE MASK

IS 16289:2014

CM/L 8300142210

CLASS 3



WITH EARLOOPS
Ref. RFM 50



WITH TIE BACK STRAPS
Ref. RFM 51

**Available in colors:*



Soft, comfortable and pain-free earloops



Adjustable nose clip For proper fit



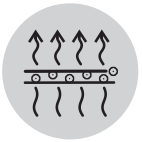
Skin friendly, sweat absorbing fabric



Water repellent Soft fabric



Meltblown filtering Fabric for ultimate protection



Breathing comfort

PERFORMANCE REQUIREMENTS AS PER IS 16289:2014 :-

Testing Parameters	Class 1	Class 2	Class 3
Minimum Bacterial Filtration Efficiency	95%	98%	98%
Maximum Differential Pressure	29.4 Pa	29.4 Pa	49.0 Pa
Minimum Splash Resistance	-	-	120 mm Hg.
Minimum Sub-micron Particulate Filtration at 0.1μ	-	-	98%

KNOW YOUR FACE RESPIRATOR MORE



Scan here *to check the steps to dispose off a used Face Respirator*

STEPS TO DISPOSE OFF A USED FACE RESPIRATOR

Step 1: Tear the Mask completely or break atleast one of the headbands/ear loops by pulling it apart so that it cannot be reused.

Step 2: Discard in a separate covered bin.

Step 3: Keep the bin for at least 72 hours.

Step 4: Give the bin contents to a recyclers.

Medical Staff
Follow hospital waste management procedures.



RECYCLABLE

As a conscious step towards sustainability and environmental protection, KARAM Respirators are 100 % recyclable.



NON WASHABLE

Is not recommended to wash a disposable Face Respirator as this damages it and lowers its filtering efficiency.



SHELF LIFE

3 years from the date of manufacturing (If stored between -5^{0}C to+50^{0}C and humidity not over 80%).

NEW

FRONTIER™
Respiratory Protection

FFP1 S DISPOSABLE FLAT FOLD RESPIRATOR WITH HEADSTRAP

Ref. FT351(P1)

IS 9473:2002

CM/L-6500040196



**Available in colors:*

FEATURES

- ISI certified, FFP1 class disposable respirator
- Low breathing resistance provides more comfort to the wearer
- Latex free soft textile two headstrap design for comfortable wearing
- The ultrasonically sealed edges to provide a proper filtration against particles
- Concealed adjustable nose clip for custom fit
- Vertical folded design for easy carriage and storage

CERTIFIED TO

IS 9473:2002

IDEAL FOR USE IN

- General Industries
- Manufacturing
- Dusty Environment
- Construction
- Pharmaceutical
- Laboratories
- Agriculture

COMPLIES AND PASSES THE FOLLOWING VITAL TESTS:

Particulate Filtering Efficiency	Requirement as per standard- 80%
Breathing Resistance	Inhalation Flow- 30 l/min: Should be less than 0.6 mbar Inhalation Flow- 95 l/min: Should be less than 2.1 mba Exhalation Flow- 160 l/min: Should be less than 3.0 mbar
Total Inward Leakage	The arithmetic mean of the Total Inward Leakage of at least 8 out of 10 subjects should not be greater than 22% The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 25%
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame

**Note- The above figures are based upon the approximate values.*

FFP2 SL DISPOSABLE FLAT FOLD RESPIRATOR WITH HEAD STRAP

Ref. FT351(P2)

IS 9473:2002

CM/L-6500040196



FEATURES

- ISI certified, FFP2 class disposable respirator
- Low breathing resistance provides more comfort to the wearer
- Latex free soft textile two headstrap design for comfortable wearing
- The ultrasonically sealed edges to provide a proper filtration against particles
- Concealed adjustable nose clip for custom fit
- Vertical folded design for easy carry and storage

CERTIFIED TO

IS 9473:2002

IDEAL FOR USE IN

- Construction
- Dusty Environment
- Metal working
- Wood working

**Available in colors:*

COMPLIES AND PASSES THE FOLLOWING VITAL TESTS:

Particulate Filtering Efficienc	Requirement as per standard- 94%
Breathing Resistance	Inhalation Flow- 30 l/min: Should be less than 0.7 mbar Inhalation Flow- 95 l/min: Should be less than 2.4 mba Exhalation Flow- 160 l/min: Should be less than 3.0 mbar
Total Inward Leakage	The arithmetic mean of the Total Inward Leakage of at least 8 out of 10 subjects should not be greater than 8% The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 11%
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame

**Note- The above figures are based upon the approximate values.*

FFP1 S DISPOSABLE FLAT FOLD RESPIRATOR WITH HEAD STRAP

Ref. FT361(P1)

IS 9473:2002

CM/L-8300137209



FEATURES

- ISI certified, FFP1 class disposable respirator
- Low breathing resistance provides more comfort to the wearer
- Latex Free soft textile two headstrap design for comfortable wearing
- **Adjuster on straps for optimal fi**
- The ultrasonically sealed edges to provide a proper filtration against particles
- Concealed adjustable nose clip for custom fit
- Four welded reinforcement helps retain shape when wearing
- Vertical folded design for easy carriage and storage

CERTIFIED TO

IS 9473:2002

IDEAL FOR USE IN

- General Industries
- Manufacturing
- Dusty Environment
- Construction
- Laboratories
- Agriculture

**Available in colors:*

COMPLIES AND PASSES THE FOLLOWING VITAL TESTS:

Particulate Filtering Efficienc	Requirement as per standard- 80%
Breathing Resistance	Inhalation Flow- 30 l/min: Should be less than 0.6 mbar Inhalation Flow- 95 l/min: Should be less than 2.1 mba Exhalation Flow- 160 l/min: Should be less than 3.0 mbar
Total Inward Leakage	The arithmetic mean of the Total Inward Leakage of at least 8 out of 10 subjects should not be greater than 22% The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 25%
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame

**Note- The above figures are based upon the approximate values.*

FFP1 S DISPOSABLE FLAT FOLD RESPIRATOR WITH HEAD STRAP AND EXHALATION VALVE

Ref. FT361(P1)+

IS 9473:2002

CM/L-8300137209



**Available in colors:*

FEATURES

- ISI certified, FFP1 class disposable respirator with exhalation valve
- Low breathing resistance provides more comfort to the wearer
- Latex Free soft textile two headstrap design for comfortable wearing
- **Exhalation valve allows one-way ventilation**
- **Adjuster on straps for optimal fi**
- The ultrasonically sealed edges to provide a proper filtration against particles
- Concealed adjustable nose clip for custom fit
- Four welded reinforcement helps retain shape when wearing
- Vertical folded design for easy carriage and storage

CERTIFIED TO

IS 9473:2002

IDEAL FOR USE IN

- General Industries
- Dusty Environment
- Laboratories
- Agriculture
- Construction

COMPLIES AND PASSES THE FOLLOWING VITAL TESTS:

Particulate Filtering Efficienc	Requirement as per standard- 80%
Breathing Resistance	Inhalation Flow- 30 l/min: Should be less than 0.6 mbar Inhalation Flow- 95 l/min: Should be less than 2.1 mba Exhalation Flow- 160 l/min: Should be less than 3.0 mbar
Total Inward Leakage	The arithmetic mean of the Total Inward Leakage of at least 8 out of 10 subjects should not be greater than 22% The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 25%
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame

**Note- The above figures are based upon the approximate values.*

FFP2 SL DISPOSABLE WELDING FLAT FOLD RESPIRATOR WITH EXHALATION VALVE

Ref. FT361(P2)(OV)+

IS 9473:2002

CM/L-8300137209



FEATURES

- ISI certified, FFP2 class disposable respirator for protection against welding fumes, spatters, flash fire and smoke
- Low breathing resistance
- **Flame retardant outer layer added with activated carbon pre-filte**
- **A metal-reinforced plastic nose-clip with padding, sealed inside the respirator**
- Latex Free soft textile two headstrap design for comfortable wearing
- **Adjuster on straps for optimal fi**
- **Exhalation valve allows one-way ventilation**
- Ultrasonically welded edges for better efficiency
- Vertical foldable design for easy carriage and storage

CERTIFIED TO

IS 9473:2002

IDEAL FOR USE IN

- Light welding applications
- Grinding
- Metal fabrication
- Foundries
- Construction
- Railway Maintenance

COMPLIES AND PASSES THE FOLLOWING VITAL TESTS:

Particulate Filtering Efficienc	Requirement as per standard- 94%
Breathing Resistance	Inhalation Flow- 30 l/min: Should be less than 0.7 mbar Inhalation Flow- 95 l/min: Should be less than 2.4 mba Exhalation Flow- 160 l/min: Should be less than 3.0 mbar
Total Inward Leakage	The arithmetic mean of the Total Inward Leakage of at least 8 out of 10 subjects should not be greater than 8% The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 11%
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame

**Note- The above figures are based upon the approximate values.*

FFP3 SL DISPOSABLE FLAT FOLD RESPIRATOR WITH HEAD STRAP AND EXHALATION VALVE

Ref. FT361(P3)+

IS 9473:2002

CM/L-8300137209



**Available in colors:*

FEATURES

- ISI certified, FFP3 class disposable respirator with exhalation valve
- Low breathing resistance provides more comfort to the wearer
- Latex Free soft textile two headstrap design for comfortable wearing
- **Exhalation valve allows one-way ventilation**
- **Adjuster on straps for optimal fi**
- **Nose padding within the nose clip for added comfort**
- The ultrasonically sealed edges to provide a proper filtration against particles
- Four welded reinforcement helps retain shape when wearing
- Vertical folded design for easy carriage and storage

CERTIFIED TO

IS 9473:2002

IDEAL FOR USE IN

- General Industries
- Manufacturing
- Dusty Environment
- Metal working
- Construction

COMPLIES AND PASSES THE FOLLOWING VITAL TESTS:

Particulate Filtering Efficienc	Requirement as per standard- 99%
Breathing Resistance	Inhalation Flow- 30 l/min: Should be less than 0.7 mbar Inhalation Flow- 95 l/min: Should be less than 2.4 mba Exhalation Flow- 160 l/min: Should be less than 3.0 mbar
Total Inward Leakage	The arithmetic mean of the Total Inward Leakage of at least 8 out of 10 subjects should not be greater than 8% The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 11%
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame

**Note- The above figures are based upon the approximate values.*

FFP2 SL DISPOSABLE CUP SHAPE RESPIRATOR WITH HEAD STRAP AND EXHALATION VALVE

Ref. FT391(P2)+

IS 9473:2002

CM/L-6500040196



**Available in colors:*

FEATURES

- Pre-formed cup shape valved respirator offering P2 class protection and foam seal at nose bridge provides wearer comfort
- **Exhalation valve allows one-way ventilation**
- **Adjuster on straps for optimal fi**
- **Nose padding within the nose clip for added comfort**
- Latex free soft textile two-strap headband design for comfortable wearing
- The ultrasonic sealed edges eliminate the lint and provides a secure feel

CERTIFIED TO

IS 9473:2002

IDEAL FOR USE IN

- Pharmaceuticals
- Metal working
- Powdered chemicals
- Powdered additives
- Construction

COMPLIES AND PASSES THE FOLLOWING VITAL TESTS:

Particulate Filtering Efficienc	Requirement as per standard- 94%
Breathing Resistance	Inhalation Flow- 30 l/min: Should be less than 0.7 mbar Inhalation Flow- 95 l/min: Should be less than 2.4 mba Exhalation Flow- 160 l/min: Should be less than 3.0 mbar
Total Inward Leakage	The arithmetic mean of the Total Inward Leakage of at least 8 out of 10 subjects should not be greater than 8% The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 11%
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame

**Note- The above figures are based upon the approximate values.*

FFP3 SL DISPOSABLE CUP SHAPE RESPIRATOR WITH HEAD STRAP AND EXHALATION VALVE

Ref. FT391(P3)+

IS 9473:2002

CM/L-6500040196



**Available in colors:*

FEATURES

- ISI certified, FFP3 class disposable respirator with exhalation valve
- Low breathing resistance provides more comfort to the wearer
- Latex free soft textile two-strap headband design for comfortable wearing
- **Exhalation valve allows one-way ventilation**
- **Elastic Adjuster on straps for optimal fi**
- **Nose padding within the nose clip for added comfort**
- The ultrasonically sealed edges to provide a proper filtration against particles
- Four welded reinforcement helps retain shape when wearing

CERTIFIED TO

IS 9473:2002

IDEAL FOR USE IN

- Pharmaceuticals
- Metal working
- Powdered chemicals
- Powdered additives
- Construction

COMPLIES AND PASSES THE FOLLOWING VITAL TESTS:

Particulate Filtering Efficienc	Requirement as per standard- 99%
Breathing Resistance	Inhalation Flow- 30 l/min: Should be less than 0.7 mbar Inhalation Flow- 95 l/min: Should be less than 2.4 mba Exhalation Flow- 160 l/min: Should be less than 3.0 mbar
Total Inward Leakage	The arithmetic mean of the Total Inward Leakage of at least 8 out of 10 subjects should not be greater than 8% The arithmetic mean of the Total Inward Leakage of at least 46 subjects should not be greater than 11%
CO_2 Content of Inhalation Air	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)
Flammability	The Face Mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame

**Note- The above figures are based upon the approximate values.*

3-PLY SURGICAL MASK
Ref. FT381

IS 16289:2014

CM/L-6500046608



FEATURES

- Protection against non-toxic dust and contaminants
- Soft, pain-free and durable ear loops
- Comfortable breathing
- Adjustable nose clip for a secure fit
- Skin-friendly, sweat and water-repellent outer layer
- Meltblown filtering layer for superior protection

CERTIFIED TO

IS 16289:2014

IDEAL FOR USE IN

- Healthcare
- Dental
- Emergency medical services (EMS)
- Pharmaceuticals
- Laboratory
- Food service
- Manufacturing
- Construction
- Education
- Public transportation

**Available in colors:*

COMPLIES AND PASSES THE FOLLOWING VITAL TESTS:

Minimum Bacterial Filtration Efficienc	Requirement as per standard- 98%
Maximum Differential Pressure	49.0 Pa
Minimum Splash Resistance	120Hg
Minimum Sub-micron Particulate Filtration	0.1μ- 98%

**Note- The above figures are based upon the approximate values.*

NOTE

HEAD PROTEKTION



The KARAM range of Safety Helmets offers the best combination of exceptional comfort; simple integration of additional personal protective equipment and modern stylish design. KARAM range of Safety Helmets is a testimony to a service that has constantly evolved to provide the finest in Head Protection to personnel working under the most challenging industrial environments.

Scan here *for a virtual tour of the product*

Standards at a Glance

KARAM Safety Helmets are tested and certified to the norms EN 397:2012+A1:2012 and ANSI/ISEA Z89.1-2014(R2019) for protection against falling objects and consequential brain injury and skull fracture.

EN 397:2012+A1:2012

Mandatory requirements: All Helmets certified according to EN 397:2012+A1:2012 must meet these requirements:

- Shock absorption test
- Penetration resistance test
- Flame resistance test
- Chin strap test

Optional requirements: A Helmet certified in accordance with EN 397:2012+A1:2012 may meet these requirements; they are, however, not mandatory requirements:

- Very low temperatures (-20 °C or -30 °C)
- Very high temperatures (+150 °C)
- Molten metal (MM)
- Lateral deformation

ANSI/ISEA Z89.1-2014(R2019)

All Helmets certified according to ANSI/ISEA Z89.1-2014(R2019) must meet the requirements of either Type I or Type II requirements of ANSI Z89.1-2014(R2019). All Helmets shall be futher classified as meeting Class G, Class E or Class C Electrical Requirements

Mandatory Tests for Type I and Type II

- Force Transmission
- Penetration resistance Test
- Flame resistance test
- Electrical Insulation

Additional Mandatory Tests for Type II

- Impact Energy Attenuation
- Off- Center Penetration
- Chin Strap Test

Optional Tests for Type-I and Type II

- Reverse Wearing
- High Visibility

IS 2925:1984

Mandatory requirements: All Helmets certified according to IS 2925:1984 must meet these requirements:

- Shock absorption test
- Penetration test
- Heat resistance test
- Electrical resistance test
- Flame resistance test



SHOCK ABSORPTION TEST



PENETRATION RESISTANCE TEST

Testing

TESTED & CERTIFIED

IS 2925:1984 CM/L 3242342

CE 0598

DGMS



CONDITIONING CHAMBER



LATERAL DEFORMATION TEST

KARAM SAFETY HELMETS

- Built to Last
- Maximum Protection and Extra Comfort
- Superior Performance

Increased Vertical Clearance for Optimum Shock Absorption

Corrugations for Enhanced Strength



Adjustable to suit most head sizes

Adjustable Chin Strap for Universal Adjustment

Rain Management System for managing the Rain to reduce the flow of Water down the neck

FEATURES OF KARAM SAFETY HELMETS



Slider type adjustment to suit most head sizes



Ratchet type adjustment for comfort and better grip



6 point plastic cradle for reduction of point impact



6 point textile cradle for reduction of point impact and extreme comfort



Extended nape for extra impact protection to the user's neck



Y-type chin strap to eliminate all the possible chances of Helmet from coming off the head



Non-irritant head band for good absorption of sweat



Universal slot of 30 mm for attaching face and hearing protection accessories

ADDITIONAL FEATURES OFFERED ON REQUEST



Replaceable chin strap



Chin cup



Adjustable slider buckle



Lamp Bracket and Cable Clip

The Helmet inner Harness is available in two options- Plastic or Textile as per the customer need.

KARAM SAFETY HELMETS

KARAM range of Safety Helmets comes with a plethora of features that not only offer the intended protection but also the comfort and design that ensures usage for prolonged working hours.

- **Performance and Protection:** Prepared for real-life harsh industrial conditions, KARAM Safety Helmets minimize and effectively disperse the impact forces.
- **All-day Comfort:** Equipped with all the features of light-weight, rigid nature, and comfortable in wearing, KARAM Safety Helmets can be worn continuously for long durations.
- **Balanced and Stable:** With a secure head harness and a low profile design, KARAM Helmets deliver maximum stability and perfect balance.
- **Built to Last:** Manufactured from virgin premium grade, UV stabilized Polymers with no regrind, KARAM Safety Helmets are built to withstand the toughest of environments.
- **Tested and Certified:** KARAM Safety Helmets are tested and certified to all relevant standards.

Extensive PPE Connectivity

KARAM Safety Helmets can be fitted with a variety of additional Personal Protective Equipment such as:



Welding Shield (ES 71)



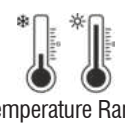
Polycarbonate Visor (ES 51)

Branding Services: KARAM Safety Helmets are an ideal product to display your company logo upon. With large branding areas and multi positions, logos can be printed to offer a professional corporate identity.

Symbols used for Head Protection



Electrical Properties



Temperature Range



Lateral Deformation



Molten Metal



Ref. PN 521
Ratchet type adjustment

Available in colours

SHELMET

Ref. PN 501

IDEAL FOR USE

Construction industry and in all other industries where there is a risk of being injured from falling objects or when working in areas with restricted head space.

GENERAL FEATURES

- Triple corrugation for enhanced strength.
- Made up of polypropylene co-polymer.
- Increased vertical clearance for optimum shock absorption.
- Extended nape for extra impact protection to the user's neck.

ALSO AVAILABLE

Ratchet type adjustment Ref. PN 521

CERTIFIED TO

IS 2925:1984

IS 2925:1984
CM/L 3242342

DGMS



-10°C +50°C

***Scan here** for a virtual tour of the product*



Ref. PN 542
Ratchet type adjustment

Available in colours

SHELBLAST

Ref. PN 541

IDEAL FOR USE

Construction, oil and gas, real estate, iron, steel, petro chemicals, mining industry and in all other industries where there is a risk of being injured from falling objects or when working in areas with restricted head space.

GENERAL FEATURES

- Dual corrugation.
- Made up of polypropylene co-polymer.
- Slider/nape type adjustment to suit most head sizes.
- Increased vertical clearance for optimum shock absorption.
- Extended nape for extra impact protection to the user's neck.
- Has ventilated slots which can be opened / closed with the help of a shutter to prevent any rain water seepage.
- **PN 542 comes with improved electrical insulation proof voltage test of 5kV and withstands voltage test of 10kV).**

ALSO AVAILABLE

Ratchet type adjustment Ref. PN 542.

CERTIFIED TO

EN 397:2012+A1:2012
PN 542 certified to EN 50365:2002

EN 397:2012+A1:2012



*Available in colours

Ref. PN 541(YTC)
Slider type adjustment

SHELBLAST
Ref. PN 542(YTC)

IDEAL FOR USE
Construction, oil and gas, real estate, iron, steel, petro chemicals, mining industry and in all other industries where there is a risk of being injured from falling objects or when working in areas with restricted head space.

GENERAL FEATURES
- Dual corrugation.
- Made up of polypropylene co-polymer.
- Increased vertical clearance for optimum shock absorption.
- **Y- type chin strap for more snug fit and to eliminate all th possible chances of helmet from coming off the head.**
- Ratchet type adjustment for comfort and better grip.
- Has ventilated slots which can be opened / closed with the help of a shutter to prevent any rain water seepage.

ALSO AVAILABLE
Slider type adjustment Ref. PN 541(YTC).

CERTIFIED TO
EN 397:2012+A1:2012

CE
EN 397:2012+A1:2012



*Available in colours

Ref. PN 545
Slider type adjustment

SHELBLAST
Ref. PN 546

IDEAL FOR USE
Construction, oil and gas, real estate, iron, steel, petro chemicals, mining industry and in all other industries where there is a risk of being injured from falling objects or when working in areas with restricted head space.

GENERAL FEATURES
- Dual corrugation.
- Made up of polypropylene co-polymer.
- **Peakless design for unobstructed and wider vision.**
- Increased vertical clearance for optimum shock absorption.
- Ratchet type adjustment for comfort and better grip.
- Has ventilated slots which can be opened / closed with the help of a shutter to prevent any rain water seepage.

ALSO AVAILABLE
Slider type adjustment Ref. PN 545.

CERTIFIED TO
EN 397:2012+A1:2012

CE
EN 397:2012+A1:2012





Ref. PN 545(YTC)
Slider type adjustment

*Available in colours



SHELBLAST

Ref. PN 546(YTC)

IDEAL FOR USE

Construction, oil and gas, real estate, iron, steel, petro chemicals, mining industry and in all other industries where there is a risk of being injured from falling objects or when working in areas with restricted head space.

GENERAL FEATURES

- Dual corrugation.
- Made up of polypropylene co-polymer.
- **Peakless design for unobstructed and wider vision.**
- Increased vertical clearance for optimum shock absorption.
- **Y- type chin strap for more snug fit and to eliminate all the possible chances of helmet from coming off the head.**
- Ratchet type adjustment for comfort and better grip.
- Has ventilated slots which can be opened / closed with the help of a shutter to prevent any rain water seepage.

ALSO AVAILABLE

Slider type adjustment Ref. PN 545(YTC).

CERTIFIED TO

EN 397:2012+A1:2012
IS 2925:1984

IS 2925:1984
CM/L 3242342

CE
EN 397:2012+A1:2012

NEW



Ref. PN 561
Slider type adjustment

SHELTEK

Ref. PN 581

IDEAL FOR USE

Construction, oil and gas, real estate, iron, steel, petro chemicals, mining industry and in all other industries where there is a risk of being injured from falling objects or when working in areas with restricted head space.

GENERAL FEATURES

- Quadro corrugation for enhanced strength.
- Made up of polypropylene co-polymer.
- Increased vertical clearance for optimum shock absorption.
- **Improved electrical insulation proof voltage test of 5kV and withstands voltage test of 10kV.**

ALSO AVAILABLE

Slider type adjustment Ref. PN 561

CERTIFIED TO

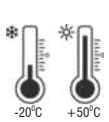
EN 397:2012+A1:2012
EN 50365:2002

CE
EN 397:2012 +A1:2012
EN 50365:2002



*Available in colours





NEW





440 V a.c

Available in colours



Ref. PN 581(T)
Ratchet type adjustment

SHELTEK

Ref. PN 561(T)

IDEAL FOR USE

Construction, oil and gas, real estate, iron, steel, petro chemicals, mining industry and in all other industries where there is a risk of being injured from falling objects or when working in areas with restricted head space.

GENERAL FEATURES

- Quadro corrugation for enhanced strength.
- Made up of polypropylene co-polymer.
- Increased vertical clearance for optimum shock absorption.
- **Textile cradle having breathable fabric for utmost comfort during prolonged usage.**

ALSO AVAILABLE

Ratchet type adjustment Ref. PN 581(T)

CERTIFIED TO

EN 397:2012+A1:2012
IS 2925 :1984

IS 2925:1984
CM/L 3242342

CE
EN 397:2012+A1:2012

NEW



Available in colours



Back View

SHELTOR

Ref. PN 571

IDEAL FOR USE

Industries which require high resistance against chemical, stress and creep.

GENERAL FEATURES

- Light weight and high resilience to impact, hence excellent impact resistance and toughness.
- **Made of acrylonitrile butadiene-styrene thermoplastic (ABS).**
- **Ventilation holes for air circulation, enhances the user comfort.**
- Front sweat band and back head pad for increased user comfort.
- Increased vertical clearance for better shock absorption.
- **Textile cradle having breathable fabric for utmost comfort during prolonged usage.**
- Ratchet type adjustment for comfort and better grip.

CERTIFIED TO

EN 397:2012+A1:2012

CE
EN 397:2012+A1:2012

NEW



Available in colours



Back View

SHELTOR
Ref. PN 574

IDEAL FOR USE

Industries which require high resistance against chemical, stress and creep.

GENERAL FEATURES

- **Made of acrylonitrile butadiene-styrene thermoplastic (ABS).**
- Light weight and high resilience to impact, hence excellent impact resistance and toughness.
- Exceptional performance under extreme temperature conditions.
- Front sweat band and back head pad for increased user comfort.
- Increased vertical clearance for better shock absorption.
- Ratchet type adjustment for comfort and better grip.
- **Textile cradle having breathable fabric for utmost comfort during prolonged usage.**

CERTIFIED TO

ANSI/ISEA Z89.1-2014(R2019) TYPE 1, CLASS G and E
IS 2925:1984

IS 2925:1984
CM/L 3242342

ANSI/ISEA Z89.1-2014(R2019)
TYPE 1, CLASS G and E

NEW

Aironic ActivCooling™ Safety Helmet

Bringing forth a new revolutionary technology in safety with KARAM Aironic ActiveCooling™ Safety Helmet. Designed to provide relief from the excess heat and cold in industrial and outdoor work scenarios. The Helmet is equipped to maintain an ideal temperature for the head.

- LED indicator for operations status
- For Hot/Cold work environments
- Made up of injection molded polymer
- Comes with a charger pin and a battery indicator
- Y-chin strap

For Helmet

For ActivCooling Unit

NEW

Ref. PN 629AC



NEW

Ref. PN 630AC





Waist Belt

AIRONIC ACTIVCOOLING™ HELMET

IDEAL FOR USE

- In hot environment work like Boiler Room, Furnace, Low Ventilation, Outdoor etc.
- Short Workplace round by Executive / Foreign Delegates / Visitors in Hot and Humid Indoor/Outdoor conditions etc.
- Executive / Top officials visiting under-Construction Sites.
- Steel / Construction / Chemicals / Food / Automobiles / Metal Sheets etc.

GENERAL FEATURES

- Compact, portable and light in weight.
- Provides safety, comfort and adaptive cooling experience.
- Built to last with high-quality material, ensuring durability and reliability even in challenging working conditions.
- Designed for high-temperature and low-ventilation zones.
- Comes with rechargeable and certified li-ion battery.
- Designed for 40°C to 60°C environments.
- ActivCooling™ unit has an average working life span of about 11,000 hours.
- Has lower noise levels below standard norms with higher efficiency.
- Easy navigation switches between heating and cooling modes.
- Zero maintenance and zero risk of leakages.
- Charges in 1 hour with internal battery and 4 hours with external battery.
- External battery comes with built-in hooks for attaching to the user's belt.
- PN 630AC also comes with a belt that is worn around the waist, offering the user increased comfort during work.

CONFORMS TO

IS 2925:1984; ActiveCooling Unit Conforms to EN 397.

IS 2925:1984
CM/L 3242342

PN 629AC	PN 630AC
Internal Battery (2 hours runtime)	External Battery (8 hours runtime)







PN 595(Blue)

BUMP CAP
Ref. PN 595

IDEAL FOR USE

In warehousing and logistics, food processing, maintenance, retail, automotive industry, transportation and logistics.

GENERAL FEATURES

- Comes with a new, classy, sleek design, providing a better field of view.
- **Cap shell is made of acrylonitrile butadiene-styrene thermoplastic (ABS).**

CERTIFIED TO

EN 812:2012

CE

EN 812:2012

ALSO AVAILABLE:

Color Options	Blue Black
Peak Options	3cm 5cm

FEATURES:



Retroreflective strip at the sides and in front allowing the bump cap to reflect light, providing increased visibility and safety



Ventilated design with fabric mesh for maintaining air flow and comfort



Padding inside the cap shell for shock absorption



Adjuster lock and elasticated back strap for a snug fit

EN Certified Shelblast ange of Safety Helmets

	Shelblast PN 541	Shelblast PN 541(YTC)	Shelblast PN 542	Shelblast PN 542(YTC)
				
Material of Shell	Polypropylene Co-polymer	Polypropylene Co-polymer	Polypropylene Co-polymer	Polypropylene Co-polymer
Corrugation	Dual	Dual	Dual	Dual
Cradle Attachment Points	6	6	6	6
Type of Adjustment	Slider Type	Slider Type	Ratchet Type	Ratchet Type
Crown Cooling Vents	✓	✓	✓	✓
Rain Management System	✓	✓	✓	✓
Protective Peak	✓	✓	✓	✓
Side Slots	✓	✓	✓	✓
Adjustable Chin Strap	✓	✓	✓	✓
Type of Chin Strap	2 Point	4 Point (Y-shape chin strap)	2 Point	4 Point (Y-shape chin strap)
Cradle Type	Plastic	Plastic	Plastic	Plastic
Temperature Range	-10^0C to $+50^0$C	-10^0C to $+50^0$C	-10^0C to $+50^0$C	-10^0C to $+50^0$C
Electrical Properties	✗	✗	✓	✗
Lateral Deformation	✗	✗	✗	✗
Weight	380 gms ± 10 gms	400 gms ±10 gm	420 gms ± 10 gms	435 gms ± 10 gms

EN Certified Shelblast ange of Safety Helmets

	Shelblast PN 545	Shelblast PN 545(YTC)	Shelblast PN 546	Shelblast PN 546(YTC)
				
Material of Shell	Polypropylene Co-polymer	Polypropylene Co-polymer	Polypropylene Co-polymer	Polypropylene Co-polymer
Corrugation	Dual	Dual	Dual	Dual
Cradle Attachment Points	6	6	6	6
Type of Adjustment	SliderType	SliderType	Ratchet Type	Ratchet Type
Crown Cooling Vents	✓	✓	✓	✓
Rain Management System	✓	✓	✓	✓
Protective Peak	✗	✗	✗	✗
Side Slots	✓	✓	✓	✓
Adjustable Chin Strap	✓	✓	✓	✓
Type of Chin Strap	2 Point	4 Point (Y-type chin strap)	2 Point	4 Point (Y-type chin strap)
Cradle Type	Plastic	Plastic	Plastic	Plastic
Temperature	-10^{0}C to +50^{0}C	-10^{0}C to +50^{0}C	-10^{0}C to +50^{0}C	-10^{0}C to +50^{0}C
Electrical Properties	✗	✗	✗	✗
Lateral Deformation	✗	✗	✗	✗
Weight	375 gms ±10 gms	395 gms ±10 gms	410 gms ±10 gms	425 gms ±10 gms

EN Certified Sheltek range of Safety Helmets

	Sheltek PN 561	Sheltek PN 581	Sheltek PN 561(T)	Sheltek PN 581(T)
				
Material of Shell	Polypropylene Co-polymer	Polypropylene Co-polymer	Polypropylene Co-polymer	Polypropylene Co-polymer
Corrugation	Quadro	Quadro	Quadro	Quadro
Cradle Attachment Points	6	6	6	6
Type of Adjustment	SliderType	Ratchet Type	SliderType	Ratchet Type
Crown Cooling Vents	✗	✗	✗	✗
Rain Management System	✓	✓	✓	✓
Protective Peak	✓	✓	✓	✓
Side Slots	✓	✓	✓	✓
Adjustable Chin Strap	✓	✓	✓	✓
Type of Chin Strap	2 Point	2 Point	2 Point	2 Point
Cradle Type	Plastic	Plastic	Textile	Textile
Temperature	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C
Electrical Properties	✓	✓	✓	✓
Lateral Deformation	✓	✓	✓	✓
Weight	380 gms ±10 gms	405 gms ±10 gms	355 gms ±10 gms	380 gms ±10 gms

EN / ANSI Certified Sheltor Range of Safety Helmets

	CE Sheltor PN 571	Sheltor PN 574 ANSI
		
Material of Shell	Acrylonitrile Butadiene Styrene Thermoplastic (ABS)	Acrylonitrile Butadiene Styrene Thermoplastic (ABS)
Corrugation	Dual	Dual
Cradle Attachment Points	6	6
Type of Adjustment	Ratchet Type	Ratchet Type
Crown Cooling Vents	✓	✗
Rain Management System	✗	✗
Protective Peak	✓	✓
Side Slots	✓	✓
Adjustable Chin Strap	✓	✓
Type of Chin Strap	2 Point	2 Point
Cradle Type	Textile	Textile
Temperature Range	-10^0C to $+50^0$C	-10^0C to $+50^0$C
Electrical Properties	✗	✗
Lateral Deformation	✗	✗
Weight	495 gms ±10 gms	498 gms±5 gms (1.09 lbs±0.01 lbs)

ISI Certified Shelmet ange of Safety Helmets		
	PN 501	**PN 521**
		
Material of Shell	Polypropylene Co-polymer	Polypropylene Co-polymer
Corrugation	Triple	Triple
Cradle Attachment Points	4	4
Type of Adjustment	Manual Type	Ratchet Type
Crown Cooling Vents	✗	✗
Rain Management System	✓	✓
Protective Peak	✓	✓
Ventilated Slots	✗	✗
Side Slots	✓	✓
Adjustable Chin Strap	✓	✓
Weight	300 gms ± 10 gms	330 gms ±10 gm

Aironic ActivCooling™ Helmet and Bump Cap		
	PN 629AC	**PN 630AC**
		
Material of Shell	Injection Molded Polymer	Injection Molded Polymer
Visor Material	Polycarbonate	Polycarbonate
Type of Adjustment	Ratchet	Ratchet
Corrugation	Triple	Triple
Cradle Adjustment Points	4 Points Adjustment	4 Points Adjustment
Type of Chin Strap	4 point (Y-shaped chin strap)	4 point (Y-shaped chin strap)
Battery Option	Internal	External

NEW

FRONTIER™
Safety Helmets



IS 2925:1984

CM/L 6500003089

FEATURES

- Wide rain channel
- Sweat band for good absorption of sweat
- Pin-Lock adjustment for secure fit
- Wheel Ratchet adjustment for better fit and comfort
- Universal slots for fitting Visors and Earmuffs
- Adjustable Chin Strap for securing Helmet in place
- 4 - Point LDPE/6 Point LDPE suspension for optimal shock absorption and comfort
- Features three level of harness depth adjustment for a custom fit, enhancing safety and comfort while ensuring stability during use

ADDITIONAL FEATURES OFFERED ON REQUEST



Chin Cup



Adjustable Slider Buckle



Lamp Bracket

FEATURES



Rain Channel



Sweat Band



Pin Lock



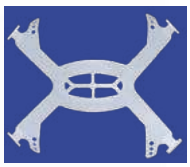
Wheel Ratchet



Universal Slot



Adjustable Chin Strap



4-Point LDPE suspension



6-Point LDPE suspension



Three Level of Harness Adjustment

***BRANDING SERVICES:**

Frontier Safety Helmets are perfect for showcasing your company logo. With extensive branding areas and various positioning options, you can prominently display your logo to create a strong professional identity.



IS 2925:1984

CM/L 6500003089

INDUSTRIAL SAFETY HELMET

Ref. FT01

Light weight helmet for comfort, designed for universal fit

FEATURES

- Light Weight, Triple ribbed shell
- Made of high-density polyethylene
- Designed for higher lateral compression strength
- Private labelling option available
- Three level of harness depth adjustment for superior fit
- Pin lock adjustment

IDEAL FOR USE IN THE FOLLOWING INDUSTRIES

Construction, Transportation Infrastructure, Railways, Shipping and Logistics, Heavy Engineering, Oil and Gas and Automobile etc.

**Available in colours*

Standard

Customized



IS 2925:1984

CM/L 6500003089

INDUSTRIAL SAFETY HELMET

Ref. FT11

Light weight industrial safety helmet.
Reassuring strength with feel-good comfort.

FEATURES

- Durable non-ventilated shell design
- 6-point LDPE harness offers optimum shock absorption
- Three level of harness depth adjustment for superior fit
- Universal slots to easily attach visors and/or earmuffs
- Pinlock adjustment

IDEAL FOR USE IN THE FOLLOWING INDUSTRIES

Construction, Automotive, Manufacturing, Oil and Gas, Railways, Logistics and Warehousing etc.

ALSO AVAILABLE - Ref. FT 15

Wheel ratchet type adjustment

**Available in colours*

Standard

Customized



FRONTIER INDUSTRIAL SAFETY HELMETS VARIANTS CHART			
	FT01	FT11	FT15
Harness Attachment Points	4	6	6
Type of Adjustment	Pin-lock	Pin-lock	Wheel Ratchet
Rain Channel	Yes	Yes	Yes
Protective Peak	Yes	Yes	Yes
Side Slots	Yes	Yes	Yes
Adjustable Chin Strap	Yes	Yes	Yes

EYE PROTEKTION



KARAM presents a range of Safety Eyewear providing superior quality, optimum protection and comfort to the user. The complete range of Safety Eyewear by KARAM is CE, ANSI and IS certified.

Scan here *for a virtual tour of the product*

Standards at a Glance

EN 166:2001 - Personal Eye Protectors

Provides protection against various hazards, encountered in industry, laboratories, educational establishments, DIY activities etc. which are likely to damage the eye or impair vision, with the exception of nuclear radiation, X-rays, laser beams and low temperature Infrared (IR radiation emitted by low temperature sources).

All Eyewear certified according to EN 166:2001 must meet these requirements:

- Field of Vision-Optical Clarity Class 1 (-0.06 D to +0.06 D)
- Lateral Vision protects against impacts from the side
- UV Protection Transmittance of 0.0003% for 313nm and 10% of 365nm
- Tested against high-speed particles at extremes of temperatures (-5°C to 55°C)
- Drop Ball Impact Test to check the robustness of the lens
- Optically tested for zero power lens, transmittance test, stability under UV radiation, diffusion of light and field of view
- Quality of material and surface-material will not cause skin irritation and free from sharp edges which cause discomfort or injury
- Resistance to impact 6mm dia steel ball weighing 0.86g Eyewear-Low impact (45m/s) Goggles-Medium impact (120m/s)
- Goggles - Protection against droplets and splashes of liquid
- Resistance to fog and scratch
- Resistance to Ageing, Corrosion and Ignition

All Eyewear certified according to ANSI/ ISEA Z87.1-2015 must meet these requirements:

- Optical requirements: Optical Quality, Luminous Tramission for Clear Lens and Haze for clear Lens, Refractive Power, Astigmatism, Resolving Power, Prism and Prism Imbalance for Plano Protectors
- Physical Requirements: Ignition and Minimum coverage area
- General: Lateral side coverage
- Impact Requirements: High mass impact, High velocity impact and Penetration test for lens only
- Optical Radiation Protector Requirements: Transmission Requirements and Visible light filters

All Eyewear certified according to IS 8521(Part-1):2022 must meet these requirements:

Geometrical optical requirement for protectors

- Field of View, Spherical and cylindrical power, Spatial deviation
- Prism imbalance of complete eye protectors or plano lenses covering both eyes
- Enhanced optical performance (optional requirement)

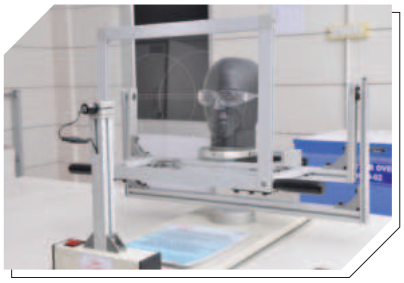
Physical optical requirements for protectors

Luminous transmittance of lenses without deliberate filter action, Scattered light

Physical and mechanical requirements for protectors

General requirements:

- Area to be protected by Eye protectors
- Lateral protection
- Headbands and harnesses
- Quality of material and surface of mounted and unmounted lenses, visors and filters
- Resistance to thermal exposure, UV radiation
- Resistance to corrosion, ignition
- Penetration of vents and gaps
- High-speed impact resistance, impact level C, D, E (optional requirement)
- High mass impact, impact level HM (optional requirement
- Chemical resistance (optional requirement)

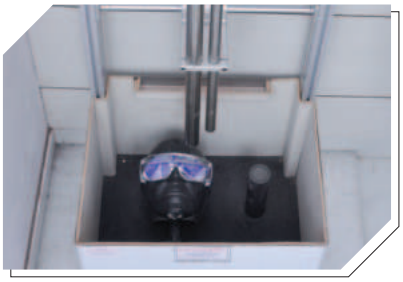


FIELD OF VIEW TEST



QUALITY OF MATERIAL AND SURFACE TEST

Testing



DROP BALL IMPACT TEST



STRESS VIEW TEST

TESTED & CERTIFIED

IS 8521(Part1):2022

CM/L 8300142505

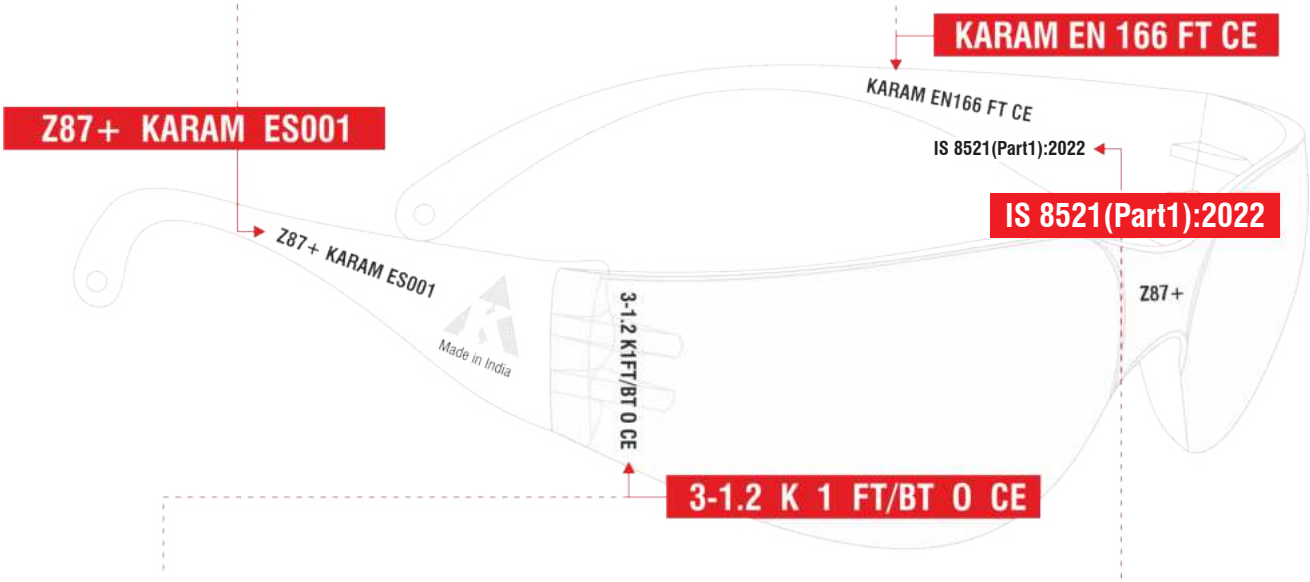
MARKING ON KARAM SAFETY EYEWEAR

On Temple (on one side)

Marking	Meaning
Z87+	ANSI Standard
KARAM	Manufacturer Identity
ES001	Product Reference Number

On Temple (on another side)

Marking	Meaning
KARAM	Manufacturer Identity
EN166	EN Standard
FT	F- Low Energy Impact T- Tested at Elevated Temperatures
CE	Certification Mark



On Lens (EN)

Marking	Meaning
3-1.2	Lens Scale Number
K	Manufacturer Identification (KARAM)
1	Class
FT/BT	F- Low Energy Impact T- Tested at Extreme Temperatures B- Medium Energy Impact T- Tested at Extreme Temperatures
O	Original or Replacement Ocular
CE	Certification Mark

On Temple (on outer side)

Marking	Meaning
IS 8521(Part1):2022	ISI Marking

Lens Marking	
Clear	3-1.2 K 1 FT O CE
Smoked	5-3.1 K 1 FT O CE
Amber	2-1.2 K 1 FT O

KARAM SAFETY EYEWEAR

- Maximum Safety
- Light in Weight
- Excellent Vision
- Exceptional Impact

Sleek and Fashionable, offering all comfort features

Redefining the Ergonomics- Adjustable Models to fit one and all



Scratch Resistant Coating or Hard Coating provide lenses with durability and increased longevity. A high quality thermally cured hardcoat provides the best scratch resistance property to the lens.

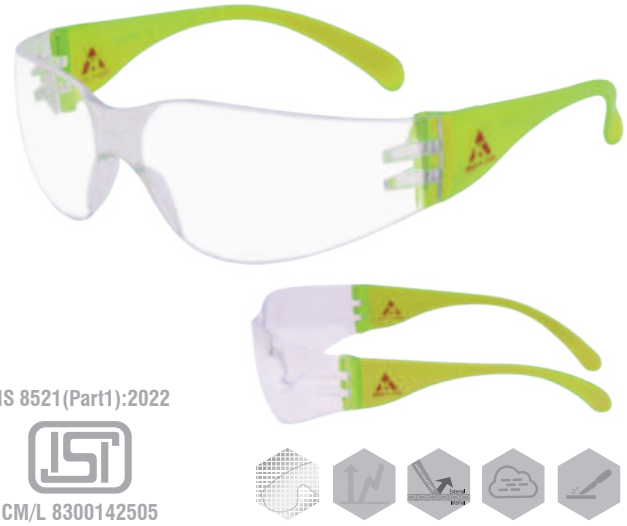
Also available- Models of Spectacles that fit over the prescription glasses as well

Anti-Fog Lenses- To make sure that no fogging appears on those models of Spectacles that seal the face area

SYMBOLS USED FOR EYE PROTECTION



GENERAL SERIES OF SPECTACLES - ECONOMICAL



IS 8521(Part1):2022

CM/L 8300142505

Ref. ES 001 NG

IDEAL FOR USE

In construction sites; areas where sand and large dust particles are blowing at high speed and metal processing shops.

GENERAL FEATURES

- Extremely lightweight with a flexible temple to ensure a snug fit on all users.
- Unique wrap-around design for better coverage.
- Provides optimum protection against harmful UV radiation.
- Provided with a clock on the temple to display the month and year of manufacturing.
- Tested at elevated temperatures, resistant to corrosion, resistant to ignition and optically tested.
- Tested for disinfection and increased robustness.

An Ultra lightweight model offering the highest level of eye protection against high speed particles.



ES 001 (Clear)(PK) | ES 001 (Clear) | ES 001 (Smoked)(NG) | ES 001 (Smoked)

ANSI Z 87.1-2020

EN 166:2001, EN 167:2001
EN 172:1994+A1:2000 & A2:2001
EN 168:2001, EN 170:2002



IS 8521(Part1):2022

CM/L 8300142505

Ref. ES 005

IDEAL FOR USE

In construction sites; areas where sand and large dust particles are blowing at high speed and metal processing shops.

GENERAL FEATURES

- Extremely lightweight with a hard-coated lens for scratch resistance.
- Wrap-around design for better coverage.
- Adjustable temple length within a range of 14mm to customize the fit on the user's head.
- Provides optimum protection against harmful UV radiation.
- Tested at elevated temperatures, resistant to corrosion, resistant to ignition and optically tested.
- Tested for disinfection and increased robustness.

When it comes to fashion and styling combined with the optimum level of eye protection against high-speed particles, the ES 005 becomes an ideal choice for the wearer.



ES 005(Smoked)

ANSI Z 87.1-2010

EN 166:2001, EN 167:2001
EN 172:1994+A1:2000 & A2:2001
EN 168:2001, EN 170:2002

GENERAL SERIES OF SPECTACLES - PREMIUM





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.



ES 006(Indoor/Outdoor)

Ref. ES 006

IDEAL FOR USE

In areas where light conditions change from normal to bright.

GENERAL FEATURES

- Unique wrap-around design for better coverage.
- Adjustable temple length within a range of 14mm to customize the fit on the user's head.
- Equipped with specially designed soft nose-pad to provide extra comfort.
- Provides optimum protection against harmful UV radiation.
- Comes with anti-scratch coating for scratch resistance and durability.
- Tested at elevated temperatures, resistant to corrosion, resistant to ignition and optically tested.
- Tested for disinfection and increased robustness.

IS 8521(Part1):2022 CM/L 8300142505 ANSI Z 87.1-2015 CE EN 166:2001





3 STEPS FOR TEMPLE ADJUSTABILITY



When it comes to fashion and styling, combined with superior eye protection, the ES 015 becomes an ideal choice for the wearer.



ES 015 (Smoked)



ES 015 (Clear, Anti-fog)(NG)

Ref. ES 015

IDEAL FOR USE

In construction sites; areas where sand and large dust particles are blowing at high speed; metal-processing shops.

GENERAL FEATURES

- Offers exceptional impact resistance with excellent vision.
- Adjustable temple length within a range of 15mm to customize the fit on the user's head.
- Provides optimum protection against harmful UV radiation.
- Tested at elevated temperatures, resistant to corrosion, resistant to ignition and optically tested.
- Tested for disinfection and increased robustness.

IS 8521(Part1):2022 CM/L 8300142505 ANSI Z 87.1-2015 CE EN 166:2001



ES 015 (Clear)



ES 015 (Smoked, Anti-fog)(NG)

GENERAL SERIES OF SPECTACLES - PREMIUM

NEW



Ref. ES 017

Equipped with soft nose pads and ultra comfort temples, ES017 becomes an ideal choice for the user working for long hours.



IDEAL FOR USE

In construction, chemical processing, laboratory, aviation, food and beverage, general manufacturing, mining, oil and gas, pharmaceuticals and transportation.

GENERAL FEATURES

- Extremely light weight.
- Wrap-around design for full coverage and protection.
- Comes with soft nose pads for extra comfort and pressure free fit.
- Provides optimum protection against harmful UV radiation.
- Sleek and stylish temple design with flexible temple tips made of thermoplastic soft rubber for pressure free fit.
- Has anti-fog coating for fog free vision, better clarity and perfor-mance in misty climate.
- **Comes with anti-scratch coating for scratch resistance and durability.**
- Tested at elevated temperatures, resistant to corrosion, resistant to ignition and optically tested.
- Tested for disinfection and increased robustness.

CE

EN 166:2001

NEW



Ref. ES 018

Multiple Level Extension Arms



Temple Adjustability



Equipped with all the features of adjustability and ergo-nomics, ES 018 becomes an ideal choice for the wearer.



IDEAL FOR USE

In construction, chemical processing, laboratory, aviation, food and beverage, general manufacturing, mining, oil and gas, pharmaceuticals and transportation.

GENERAL FEATURES

- Light weight.
- Frameless, wraparound design for wide frontal coverage and lateral protection.
- **Comes with multiple level extension arms for user to adjust the length of the frame according to the face.**
- **Has 4-point temple adjustability for perfect fit on the use 's head.**
- Offers exceptional impact resistance with excellent vision.
- Provides optimum protection against harmful UV radiation.
- Has anti-fog coating for fog free vision, better clarity and performance in misty climate.
- Comes with anti-scratch coating for scratch resistance and durability.
- Tested at elevated temperatures, resistant to corrosion, resistant to ignition and optically tested.
- Tested for disinfection and increased robustness.

CE

EN 166:2001

GENERAL SERIES OF SPECTACLES - PREMIUM

NEW



Equipped with sporty look coupled with optimum level of eye protection against high-speed particles, ES 019 becomes an ideal choice for the wearer.



Ref. ES 019

IDEAL FOR USE

In construction, chemical processing, laboratory, aviation, food and beverage, general manufacturing, mining, oil and gas, pharmaceuticals and transportation.

GENERAL FEATURES

- Wrap around design for full coverage and protection
- **Sleek and stylish temple design with soft and flexible temple tips made of thermoplastic rubber for pressure free fit**
- Offers exceptional impact resistance with excellent vision.
- Provides optimum protection against harmful UV radiation.
- Has anti-fog coating for fog free vision, better clarity and performance in misty climate.
- Comes with anti-scratch coating for scratch resistance and durability.
- Tested at elevated temperatures, resistant to corrosion, resistant to ignition and optically tested.
- Tested for disinfection and increased robustness.

CE

EN 166:2001

OVER SPECTACLES





To provide comfort and protection to users wearing prescription glasses, ES 007 provides a perfect fit over prescription glasses.



ES 007(Clear)(NG)

Ref. ES 007

IDEAL FOR USE

In construction sites; areas where sand and large dust particles are blowing at high speed and metal processing shops.

GENERAL FEATURES

- It can easily fit over most prescription spectacles.
- Provides optimum protection against harmful UV radiation.
- Comes with adjustable temples to provide a better fit for the wearer.
- Tested at elevated temperatures, resistant to ignition and optically tested.
- Tested for disinfection and increased robustness.

IS 8521(Part1):2022

CM/L 8300142505

ANSI

ANSI Z 87.1-2020

CE

EN 166:2001
EN 170:2002

CHEMICAL ENVIRONMENT USER'S CHOICE GOGGLES



Ref. ES 008

IDEAL FOR USE

Areas exposed to chemical and liquid splashes.

GENERAL FEATURES

- Comes with soft and wide PVC casing around the rim to ensure 100% sealing of the eyes against chemical and liquid splashes.
- Provided with indirect ventilation slits on both the top and the bottom parts of the rim to allow for air circulation.
- Equipped with fully adjustable elastic headband for snug fit.
- Tested at elevated temperatures, resistant to corrosion, resistant to ignition and optically tested.
- Tested for disinfection and increased robustness.

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



ES 008(Smoked)

EN 166:2001

Ref. ES 009

IDEAL FOR USE

In chemical, pharmaceutical and paint industries; areas exposed to splashes of chemicals.

GENERAL FEATURES

- Comes with a unique wrap-around design
- A hardened anti-fog coated lens offers superior vision to prevent the building up of mist.
- Provides optimum protection against harmful UV radiation.
- Has a soft PVC shroud around the lens to ensure 100% sealing of the eyes against chemical and liquid splashes.
- The shroud has 4 ventilation caps, 2 on the top and 2 at the bottom of the frame. These are special one-way vents that allow air movement while keeping harmful liquid-splashes out.
- Has a fully adjustable elastic headband for a snug fit.
- Tested at elevated temperatures, resistant to ignition and optically tested.
- Tested for disinfection and increased robustness.



To provide an ultimate level of eye protection from chemical and liquid splashes, ES 009 becomes an ideal choice for the wearer.



ES 009(Smoked)

IS 8521(Part1):2022

CM/L 8300142505

ANSI Z 87.1-2020

EN 166:2001

EN 170:2002

WELDER'S CHOICE SPECTACLES





With all the Inherent design, ES 003 comes with an additional protective quality to offer. It is fitted with a special IR-5 lens, making it is an ideal choice for protection to the eyes during welding operations.

Ref. ES 003

IDEAL FOR USE

Areas involving molten metal, furnaces and welding operations.

GENERAL FEATURES

- Extremely lightweight.
- Unique wrap-around design for better coverage.
- Temple grip equipped with Thermoplastic elastomer molding, making it more comfortable for all day use.
- Temple/side arms capable of tilting within a wide range (upto 60 degree) thereby adjusting to provide the best possible fit.
- Adjustable temple length to customize fit on the user's head. Length adjustable within a range of 13mm.
- Tested at elevated temperatures, resistant to corrosion, resistant to ignition and optically tested.
- Tested for disinfection and increased robustness.

CE

EN 166:2001





Equipped with a special IR11 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 art welders.

Ref. ES 004

IDEAL FOR USE

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

GENERAL FEATURES

- Has a wide soft PVC body which provides an excellent comfort for the wearer.
- It is provided with a flip-up window to enable clear vision during those times when welding operation is not in progress.
- It is provided with four indirect ventilation caps- two on top and two at bottom.
- Comes with fully adjustable elastic head-band for a snug fit.
- Lens can easily be replaced.
- Tested at elevated temperatures, resistant to corrosion, resistant to ignition and optically tested.
- Tested for disinfection and increased robustness.

CE

EN 166:2001, EN 175:1997
EN 169:2002

ACCESSORIES



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 spectacles.



Ref. ESA 02

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

Technical Snapshot						
General Series of Spectacles - Economical						
Range	**Ref.**	**Material of Lens**	**Lens Scale No.**	**Weight**	**Lens Shade Options**	**Certified t**
Construction worker's Choice Spectacles	**ES 001**	High Impact resistant optical class 1 polycarbonate hard-coated lens for scratch resistance.	Clear: 3-1.2 Smoked: 5-3.1	26 gms approx	Clear Smoked Smoked (NG) Clear(NG) Clear anti-fog Clear(PK)	ES 001 (Clear) certified to IS 8521(Part1):2022 EN 166:2001, EN 167:2001 EN 172:1994+A1:2000 & A2:2001 EN 168:2001, EN 170:2002 **Conforms to ANSI Z 87.1-2020**
Executive Choice Spectacles	**ES 005**		Clear: 3-1.2 Smoked: 5-3.1	26 gms approx	Clear Clear anti-fog Smoked	IS 8521(Part1):2022 EN 166:2001, EN 167:2001 EN 172:1994+A1:2000 & A2:2001 EN 168:2001, EN 170:2002 **Conforms to ANSI Z 87.1-2010**

Technical Snapshot						
General Series of Spectacles - Premium						
Range	**Ref.**	**Material of Lens**	**Lens Scale No.**	**Weight**	**Lens Shade Options**	**Certified t**
General Series of Spectacles	**ES 006**	High Impact resistant optical class 1 polycarbonate hard-coated lens for scratch resistance.	Clear: 3-1.2 Indoor/Outdoor: 5-1.7	34 gms approx	Clear Indoor/outdoor Smoked Clear anti-fog	IS 8521(Part1):2022 EN 166:2001 **Conforms to ANSI Z 87.1-2015**
General Series of Spectacles	**ES 015**		Clear: 3-1.2 Smoked: 5-3.1	30 gms approx	Smoked Clear, Anti-fog (NG) Clear Smoked, Anti-fog (NG)	ES 015 (Clear) certified to IS 8521(Part1):2022 EN 166:2001 **Conforms to ANSI Z87.1-2015**
General Series of Spectacles	**ES 017**		2C-1.2	28 gms approx	Clear Anti-fog	EN 166:2001
General Series of Spectacles	**ES 018**		2C-1.2	30 gms approx	Clear Anti-fog	EN 166:2001
General Series of Spectacles	**ES 019**		2C-1.2	22 gms approx	Clear Anti-fog	EN 166:2001

Technical Snapshot						
Over Spectacles						
Range	**Ref.**	**Material of Lens**	**Lens Scale No.**	**Weight**	**Lens Shade Options**	**Certified t**
Over Specta-cles	**ES 007**	High Impact resistant optical class 1 polycarbonate hard-coated lens for scratch resistance.	Clear: 3-1.2	54 gms approx	Clear (NG) Clear Clear anti-fog	IS 8521(Part1):2022 EN 166:2001, EN 170:2002 **Conforms to ANSI Z 87.1-2020**

Technical Snapshot						
Chemical Environment User's Choice Goggles						
Range	**Ref.**	**Material of Lens**	**Lens Scale No.**	**Weight**	**Lens Shade Options**	**Certified t**
Chemical Environment User's Choice Goggles	**ES 008**	High Impact resistant optical class 1 polycarbonate hard-coated lens for scratch resistance.	Clear: 3-1.2 Smoked: 5-3.1	105 gms approx	Clear anti-fog Smoked	EN 166:2001
Chemical Environment User's Choice Goggles	**ES 009**	High Impact resistant optical class 1 anti-scratch coated Polycarbonate lens for scratch resistance.	Clear: 3-1.2 Smoked: 5-3.1	70 gms approx	Clear Anti-fog Smoked	ES 009 (Clear) certified to IS 8521(Part1):2022 EN 166:2001, EN 170:2002 **Conforms to ANSI Z 87.1-2020**

Technical Snapshot						
Welder's Choice Spectacles						
Range	**Ref.**	**Material of Lens**	**Lens Scale No.**	**Weight**	**Lens Shade Options**	**Certified t**
Gas Welder's Choice Spectacles	**ES 003**	High Impact resistant optical class 1 polycarbonate hard-coated lens for scratch resistance.	4-5 IR-5 Scale No. - 1FT	36 gms	IR05 lens	EN 166:2001
Electric Arc Welder's Choice Eyewear	**ES 004**		IR-11 Scale No. - 1FT	180 gms	IR11 lens	EN 166:2001, EN 175:1997 EN 169 :2002

NEW

FRONTIER™

Eye Protection

Ref. FT101 (Clear)





Ref. FT101 (Smoked)

FEATURES

- Extremely lightweight with flexible temples for a snug fit for all users
- Wrap-around design for enhanced coverage
- Provides optimal protection against harmful UV rays
- Built for increased durability

IDEAL FOR USE IN

- Automobile
- General industry
- Construction
- Mining
- Electronics
- Logistics & warehousing

CE
EN166:2001

IS 8521(Part1):2022
CM/L-8300142505

Ref. FT111 (Clear)





Ref. FT111 (Smoked)

FEATURES

- Sporty, sleek, and stylish design
- Metal-free dielectric construction
- Adjustable nose bridge for comfort
- Ultra-flexible, anti-slip co-injected temples for a secure fit

IDEAL FOR USE IN

- Laboratory
- Chemical industries
- Aviation industries
- Manufacturing
- Oil & gas

CE
EN166:2001

IS 8521(Part1):2022
CM/L-8300142505

Ref. FT121



CE
EN166:2001

IS 8521(Part1):2022
CM/L-8300142505

FEATURES

- Comes with a unique wrap-around design
- Hardened, anti-fog coated lens ensures clear vision and prevents mist buildup
- Offers excellent protection against harmful UV radiation
- Soft PVC shroud around the lens ensures complete sealing against chemicals and liquid splashes
- Equipped with four one-way ventilation caps—two at the top and two at the bottom—for air circulation while blocking harmful splashes
- Includes a fully adjustable elastic headband for a secure fit

IDEAL FOR USE IN

- Chemical
- Paint
- Pharmaceutical
- Laboratory

Ref. FT131



CE
EN166:2001

FEATURES

- Provides fail-proof protection against liquid and chemical splashes
- Flip-up window for convenience when not in use
- Indirect ventilation system for comfort
- Compatible with prescription glasses
- Adjustable elasticated head strap
- Anti-fog coating on both sides of goggles
- Resistant to low-impact energy from high-speed particles
- 99% UV protection

IDEAL FOR USE IN

- Chemical
- Paint
- Pharmaceutical
- Laboratory
- Metal processing shops

Ref. FT141



CE
EN166:2001

IS 8521(Part1):2022
CM/L-8300142505

FEATURES

- Easily fits over most prescription glasses
- Offers optimal protection against harmful UV radiation
- Adjustable temples for a customized fit

IDEAL FOR USE IN

- Automotive
- Manufacturing
- Logistics & warehousing
- Construction
- Oil & gas

Ref. FT151



CE
EN166:2001

IS 8521(Part1):2022
CM/L-8300142505

FEATURES

- Extremely lightweight with a hard-coated, scratch-resistant lens
- Wrap-around design for enhanced coverage
- Adjustable temple length with 14mm range for a customized fit
- Provides optimal protection against harmful UV radiation

IDEAL FOR USE IN

- Loading and unloading
- Packaging & inspections
- Gardening and landscaping
- General handling
- Cargo handling

Ref. FT161



CE
EN166:2001

FEATURES

- Protects against chemical and liquid splashes
- Comes with soft and wide PVC casing around the rim to ensure 100% sealing of the eyes against chemical and liquid splashes
- Provided with Indirect ventilation slits on both the sides on both the top and the bottom parts of the rim to allow air circulation
- Equipped with fully adjustable elastic headband for snug fit
- Provides optimum protection against harmful UV radiation
- Wear over prescription eyewear with panoramic vision
- Compatible with reusable half-masks

IDEAL FOR USE IN

- Laboratory
- Chemical industry
- Logistics & warehousing
- Aerospace
- Mining

TECHNICAL DETAILS

Ref. No.	Material of Lens	Lens Coating	Lens Shade	Lens Scale No.
FT101	Optical grade polycarbonate lens	Anti-fog Anti scratch	Clear Smoked	**Clear:** 3-1.2 **Smoked:** 5-3.1
FT111	Optical grade polycarbonate lens	Anti-fog Anti scratch	Clear Smoked	**Clear:** 3-1.2 **Smoked:** 5-3.1
FT121	Optical grade polycarbonate lens	Anti-fog Anti scratch	Clear	**Clear:** 3-1.2
FT131	Optical class 2 lens	Anti-fog Anti scratch	Clear	**Clear:** 2C-1.2
FT141	Optical grade polycarbonate lens	Anti-fog Anti scratch	Clear	**Clear:** 3-1.2
FT151	Optical grade polycarbonate lens	Anti-fog Anti scratch	Clear	**Clear:** 3-1.2
FT161	Optical grade polycarbonate lens	Anti-fog Anti scratch	Clear	**Clear:** 3-1.2

HEARING PROTEKTION



Using the right Hearing Protection equipment is vital in a specific industry situation. For Safety, Productivity and Comfort, it must reduce unwanted sound by the right amount, not too little and not too much. KARAM provides Safety solutions for different individuals and applications with a wide range of Ear Muffs and Ear Plugs.

Standards at a Glance

KARAM Ear Protectors are tested and certified to the norms to provide Protection in areas prone to a high decibel sound.

EN 352-1:2020 for Ear Muffs

Requirements: All hearing protectors certified according to EN 352-1:2020 must meet these requirements:

Materials and Construction:

Physical Testing: Sizing and adjustability, Material and Construction, Cup Rotation, Headband force and Cushion pressure, Resistance to damage when dropped, Change in headband force, Minimum attenuation, Ignitability assessment, Cleaning and Disinfection

EN 352-2:2020 for Ear Plugs

Requirements: All hearing protectors certified according to EN 352-2:2020 must meet these requirements:

Materials and Construction:

Physical Testing: Sizing and adjustability assessment, Resistance to damage, Material and Construction, Ignitability assessment, Cleaning and disinfection, Minimum attenuation

EN 352-3:2002 for Helmet Mounted Ear Muffs

Requirements: All hearing protectors certified according to EN 352-3:2002 must meet these requirements:

Materials and Construction:

Physical Testing: Sizing and adjustability, Material and Construction, Cup Rotation, Headband force and Cushion pressure, Resistance to damage when dropped, Change in headband force, Minimum attenuation, Ignitability assessment, Cleaning and Disinfection

IS 9167:1979 for Ear Protectors

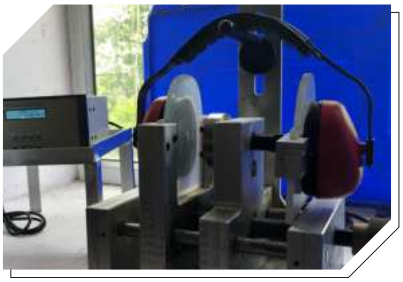
Requirements: All hearing protectors certified according to IS9167:1979 must meet these requirements:

Construction and Workmanship

Physical Testing: Visual Examination, Damp Heat Test, Accelerated, Rapid Change of Temperature Test, Low Air Pressure Test, Low Temperature Impact Test, Cleanability Test, Salt Mist Test, Headband Extension Test, Sound Attenuation Measurement



HEADBAND EXTENTION MACHINE



HEADBAND FORCE MEASURING MACHINE

Testing

TESTED & CERTIFIED

IS 9167:1979

CM/L 8300152306

CE 0598



RAPID CHANGE OF TEMPERATURE MACHINE



DAMP HEAT TESTER

It is important to use suitable hearing protectors to safeguard against over exposure to noise

Permissible Noise Exposures as per OSHA 29 CFR 1910.95	
Sound level (decibel: dB)	**Duration in hours**
90	8
92	6
95	4
97	3
100	2
102	1½
105	1
110	½
115	¼ or less

Average decibel levels in some of the common industrial and work areas	
Noise source	**Average decibel level: dB**
Jet take-off (at distance of 25m)	105
Aircraft carrier deck	140
Thunderclap, chain saw, oxygen torch (121dB)	120
Steel mill, auto horn at 1 meter. Turbo-fan aircraft at takeoff power at 200 ft (118dB). Riveting machine (110dB)	110
Power mower (96dB); newspaper press (97dB)	90
Average factory, milling machine (85dB)	80
Conversation in restaurant, office, background music	60
Conversation at home	50
Whisper, rustling leaves	20

SNR

Description: In the safety industry, SNR stands for Single Number Rating. It is a simplified rating used to mark the effectiveness of hearing protection devices, such as earplugs or earmuffs, in reducing noise exposure. The SNR value indicates the average noise reduction (in decibels, dB).

For example, if a device has an SNR of 30 dB, it means that it can reduce the noise level by 30 dB on average.

Application: The SNR value helps employers and workers choose the appropriate hearing protection based on the noise levels in the workplace.

KARAM EAR MUFFS

- Highly durable and comfortable
- Provides high dB attenuation

Soft cushioned pads for a good seal against noise



Adjustable head band

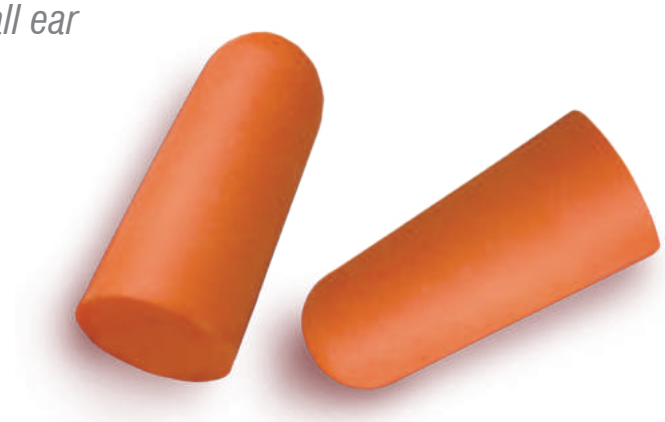
Easy to clean and store

Generous space inside the cupto help the ears breathe for increased comfort

KARAM EAR PLUGS

- Comfortable
- Covenient- available in corded / uncorded
- Provides a snug and secure custom fit

One size fits all ear canals



Extremely easy to use

Seals the ear canal for noise reduction

Reduces ear canal pressure for outstanding comfort throughout the day

EAR PLUGS

KARAM Ear Plugs are an ideal choice for Ear Protection during long hours of exposure in areas prone to a high decibel sound.

DISPOSABLE FOAM EAR PLUGS

Ref. EP 01(Uncorded)

SNR 34 dB



Ref. EP02(A) Nylon Thread

SNR 34 dB



Ref. EP02(A) Cotton Thread

SNR 34 dB



DISPENSER FOR EP 01 EAR PLUG

Ref. EP 300

Can contain 300 pairs at a time and be easily refilled.



IDEAL FOR USE

In grinding, drilling, milling operations, newspaper and press industry etc.

GENERAL FEATURES

- Made up of non- irritant and non-allergic material.
- The soft foam provides a comfortable and close-fitting seal against harmful noise.
- Easy to insert due to the tapered shape and moderately slow expansion rate.
- Corded in fluorescent orange colour (Ref. EP 02 (corded)).
- Also available in cotton cord.

CERTIFIED TO

- EN 352-2:2020
- IS 9167:1979

IS 9167:1979
CM/L 8300152306

CE
EN 352-2:2020

REUSABLE EAR PLUGS

Ref. EP 03(Uncorded)

SNR 27 dB



Ref. EP 04(Corded)

SNR 27 dB



IDEAL FOR USE

In grinding, drilling, milling operations, newspaper and press industry etc.

GENERAL FEATURES

- Made up of non- irritant and non-allergic material.
- Special flange design for maximum comfort.
- Draped around the neck, the cotton corded ear plug (Ref. EP 04) rests secured with the user.
- Washable and reusable.

CERTIFIED TO

EN 352-2:2002

CE
EN 352-2:2020

Technical Snapshot					
Product	**Ref.**	**Material**	**Size of Cord**	**SNR**	**Certified t**
Disposable Foam Ear Plugs	**EP 01**	Polyurethane(PU)	Universal	34dB	EN 352-2:2020 IS 9167:1979
	EP02(A) Nylon Thread	Cord Material: Nylon Ear Plug Material: Polyurethane(PU)		34dB	EN 352-2:2020 IS 9167:1979
	EP02(A) Cotton Thread	Cord Material: Cotton Ear Plug Material: Polyurethane(PU)		34dB	EN 352-2:2020 IS 9167:1979
Reusable Ear Plugs	**EP 03**	Thermoplastic Rubber(TPR)		27dB	EN 352-2:2002
	EP 04	Cord Material: Cotton Ear Plug Material: Thermoplastic Rubber(TPR)		27dB	EN 352-2:2002

EAR MUFFS

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

Ref. EP 21

SNR 27 dB



EAR MUFF CLASSIC

IDEAL FOR USE

In Airports, excavation equipment, generators, high frequency welding etc.

GENERAL FEATURES

- Lightweight and extremely comfortable.
- Consists of Special ABS Ear cups for durability.
- Comes with 3 adjustable positions.
- Soft cushioned pads for a good seal against noise.

CERTIFIED TO

- EN 352-1:2020
- IS 9167:1979

IS 9167:1979
CM/L 8300152306

EN 352-1:2020

Technical Snapshot					
Product	**Ref.**	**Material**	**SNR**	**Weight**	**Certified t**
Ear Muff Classic	EP 21	Acrylonitrile Butadiene Styrene(ABS)	27dB	180.0 gms	EN 352-1:2020 IS 9167:1979

Ref. EP 22

SNR 30 dB



EAR MUFF FOLDABLE DELUXE

IDEAL FOR USE

In Industrial applications like agricultural, construction, heavy machinery, etc.

GENERAL FEATURES

- Lightweight and extremely comfortable.
- Soft padded plastic headband that can be folded for dustfree storage in a pocket or a bay.
- Soft cushioned pads for a good seal against noise.

CERTIFIED TO

EN 352-1:2002

CE

EN 352-1:2002

Ref. EP 23

SNR 25 dB



HELMET ATTACHABLE EAR MUFF

IDEAL FOR USE

In Industrial applications like agricultural, construction, heavy machinery, etc.

GENERAL FEATURES

- Designed specially to use with Helmets.
- Comes with Spring loaded stand-off function to press firmly to the ear for better seal against noise.
- Has Easy snap-on/Off mechanism for Helmet mounting.
- Has Soft cushioned pads for a good seal against noise.

CERTIFIED TO

- EN 352-3:2002
- IS 9167:1979

IS 9167:1979

CM/L 8300152306

CE

EN 352-3:2002

Technical Snapshot

Product	Ref.	Material	SNR	Weight	Certified t
Ear Muff Foldable Deluxe	EP 22	Acrylonitrile Butadiene Styrene(ABS)	30dB	230.0 gms	EN 352-1:2002
Helmet Attachment Ear Muff	EP 23		25dB	260.0 gms	EN 352-3:2002 IS 9167:1979

Ref. EP 24

SNR 33 dB



EAR MUFF HIGH dB FOLDABLE

IDEAL FOR USE

In medium to heavy industrial applications.

GENERAL FEATURES

- Provides high dB attenuation with extra protective cups.
- Has soft cushioned pads as a good seal against noise.
- Has padded headband for optimum comfort to the user.
- Has soft padded plastic head band which can be folded for dust free storage in a pocket or a bag.

CERTIFIED TO

- EN 352-1:2002

CE

EN 352-1:2002

Technical Snapshot					
Product	**Ref.**	**Material**	**SNR**	**Weight**	**Certified t**
Ear Muff High dB Foldable	EP 24	Acrylonitrile Butadiene Styrene(ABS)	33dB	305.0 gms	EN 352-1:2002

Ref. EP 03(CC)



PACKING FOR DISPOSABLE FOAM EAR PLUGS

EP 01/02

- 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 PLUGS

EP 03

- 1 Pair / Pouch
- 50 Pairs / Zipper Polybag
- 60 Zipper Polybag / Master Carton
- 3000 Pair / Master Carton

EP 04

- 1 Pair / Pouch
- 50 Pairs / Zipper Polybag
- 50 Zipper Polybag / Master Carton
- 2500 Pairs / Master Carton

EP 03(CC) / EP 04(CC)

- 1 Pair / Carry Case
- 25 Pairs / Zipper Polybag
- 20 Zipper Polybag / Master Carton
- 500 Pair / Master Carton

NEW

FRONTIER™
Hearing Protection



EAR MUFF
Ref. FT201

FEATURES

- Ergonomic design provides adequate protection
- Extremely light weight construction
- Dielectric-metal free construction
- Adjustable headbands fits all face profiles
- Soft & durable ear cushions for extreme comfort

IDEAL FOR USE IN THE FOLLOWING INDUSTRIES

- Manufacturing
- General Industry
- Airport & Railways
- Construction
- Oil & Gas
- Mining etc.

CERTIFIED TO

CE

EN 352-1:2002

TECHNICAL DETAILS

SNR	27 dB		
ATTENUATION	H - 32 dB	M - 25 dB	L - 16 dB

NOTE

FACE PROTECTION



KARAM Face and Welding Shields are specifically designed to protect the wearer's face from impact felt from the front and side. They also provide protection against harmful radiation including visible light, UV/IR radiation resulting from welding processes.

Scan here *for a virtual tour of the product*

Standards at a Glance

EN 166:2001 - Requirements for Protective Eyewear

This standard applies to all types of personal eye-protectors used against various hazards, as encountered in industry, laboratories, etc. which are likely to damage the eye or impair vision, with the exception of nuclear radiation, X-rays, laser beams and low temperature infrared (IR) radiation emitted by low temperature sources.

EN 169:2002 - Requirements for filters intended to protect operators pe forming welding-related work

This standard specifies the scale number and transmittance requirements for filters intended to protect operators' performing welding related work.

EN 175:1997 - Equipment for Eye and Face Protection during Welding and Allied Processes

This standard specifies safety requirements and test methods for personal protective equipment which protects the operators eyes and face against harmful optical radiation.

IS 8521(Part-1):2022 - Face Protection for Occupational Use

Physical and mechanical requirements for protectors

Area to be protected by Face protectors, Lateral protection, Headbands and harnesses, Quality of material, visors and filters, Basic impact level of complete protectors, Resistance to thermal exposure, Resistance to UV radiation, Resistance to corrosion, ignition, Penetration of vents and gaps, High-speed impact resistance, impact level C, D, E (optional requirement), High mass impact, impact level HM (optional requirement), Chemical resistance (optional requirement)

KARAM FACE PROTECTION

- Comfortable
- Durable
- Maximum Protection

Removable lens / visor



Optimum protection to face and eyes

Easily adjustable to suit most head sizes

Special wrap around design for better coverage

TESTED & CERTIFIED

IS 5983:1980

CM/L 8300142505

Testing



PENETRATION RESISTANCE TEST



HIGH VELOCITY IMPACT TEST



FACE SHIELD

Ref. ES 51

The high-quality product protects against impact from the front and side.

IDEAL FOR USE

In heavy engineering industry, construction sites, carpentering, grinding, electric welding, forestry, petroleum and chemical industry.

GENERAL FEATURES

- Optical class 1 visor for clear and undistorted vision.
- Can be mounted onto KARAM Safety Helmets (Shelmet, Sheltek and Shelblast).
- Has a removable visor for easy replacement.

CERTIFIED TO

- EN 166:2001
- IS 8521-1:2022
- ANSI Z87.1-2020

IS 8521-1:2022 ANSI CE

CM/L 8300142505 ANSI Z87.1-2020 EN 166:2001



NEW

CLEAR POLYCARBONATE FACE SHIELD WITH RATCHET TYPE HEADGEAR

Ref. ES 52

Meant for Excellent protection from impacts and splashes from front and sides along with easy and strong head grip.

IDEAL FOR USE

Ideal for medical industry, hospital workers, chemical, biological and food processing laboratories.

GENERAL FEATURES

- Equipped with Ratchet type adjustment for excellent grip
- Comes with Head-harness consisting of sweat absorbent padding for enhanced comfort and is non-skin irritant

CONFORMS TO

- EN 166:2001
- IS 8521-1:1977

Technical Snapshot

Product	Ref.	Material	Size of Window	Operating Range	Certified t
Face Shield	**ES 51**	**Material of Lens:** High impact resistant polycarbonate for increased protection.	203.2mm x 393.7mm	NA	EN 166:2001 IS 8521-1:1977 ANSI Z87.1-2020
Face Shield	**ES 52**	**Material of Visor:** High Impact Resistant Polycarbonate **Material of Bracket Holder:** Polypropylene	200mm x 395mm	NA	**Conforms to** EN 166:2001 IS 8521-1:1977

Features of the head fitting harness of elding Helmet ES 61



Horizontal adjustment feature to provide comfort to the user when moving the shell closer or farther from the face.



Knob for adjusting the height of the shell.



The Ratchet at the nape allows easy adjustment of the harness.



4 adjustment positions for adjusting the stop angle of the Shield.



Anti-sweat comfort pad for increased comfort.



WELDING SHIELD

Ref. ES 61

Provides complete protection to the user's face during welding operations.

IDEAL FOR USE

In performing welding operations.

GENERAL FEATURES

- Equipped with a flip-up front window that the user can choose to open when not operating.
- Has removable lens which is tested against EN 175 and EN 169.
- Headband of the Welding Helmet has 4 adjustment positions and is provided with an anti-sweat comfort pad for increased comfort. Consists of ratchet adjustment for easy harness adjustment.

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

Accessory

ES 61(01) inner harness

CERTIFIED TO

EN 175:1997

CE

EN 175:1997



HELMET MOUNTABLE WELDING SHIELD

Ref. ES 71

Provides complete protection to the user's face during welding operations. Should be used only in conjunction with a safety Helmet, and should not be used independently.

IDEAL FOR USE

During welding operations.

GENERAL FEATURES

- Equipped with a flip front window that the user can choose to open when not performing an operation.
- Has adapter clamps for helmet mounting and adjustment knobs for easy and perfect fitment.
- When fitted, it will protect the wearer's face due to the special wrap-around design and **fits most standard safety Helmets which have a 30.0mm accessory attachment slot.**
- IR 11 lens is inserted between two protective lenses conforming to EN 166 and ANSI Z 87.1 for increased protection.
- Has removable lens that is tested against EN 175 and EN 169.
- Can be fitted on KARAM Helmets (Shelmet, Sheltek and Shelblast).

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

Accessory

ES 71(01) inner harness

CE

EN 175:1997

Technical Snapshot

Product	Ref.	Material	Size of Window	Operating Range	Certified t
Welding Shield	**ES 61**	**Material of Lens:** High impact resistant polycarbonate for increased protection; **Material of Shell:** Polypropylene impact resistant shell.	100mm x 75mm	-50°C to+80°C and tested for electrical insulation.	EN 175:1997
Helmet Mountable Welding Shield	**ES 71**	**Material of Lens:** High impact resistant polycarbonate; **Material of Shell:**Polypropylene impact resistant shell.	100mm x 75mm	-50°C to +80°C and tested for electrical insulation.	**Conforms to** EN 175:1997

NEW

FRONTIER™ Face Protection

ALUMINIUM CAP FRAME
Ref. FT171(01)





Example of application

The Aluminium Cap Frame is engineered for use with visors offering workers reliable protection against impact, harmful radiation, including visible light and UV/IR radiation resulting from welding processes.

FEATURES

- Made of heavy-duty Aluminum to resist high temperatures
- Plastic coated coil spring attachment fits most safety caps and helmets, while the side clips provide quick and simple attachment for Visors
- Compatible with clear & IR5 polycarbonate lenses featuring anti-scratch coating

IDEAL FOR USE IN

- Oil & Gas
- Metal Fabrication
- Logistics
- Carpentering
- Grinding
- Welding
- Construction
- Warehousing
- Mining

PLASTIC CAP FRAME
Ref. FT171(02)





Example of application

The Plastic Cap Frame when used with visor delivers reliable protection and comfort for workers in demanding settings. Featuring an adjustable fit and compatibility with various visors, it ensures optimal visibility while safeguarding against hazards.

FEATURES

- Made from Polypropylene (PP), Frontier Aluminium Cap Frame when used with visor provides protection against molten metal splashes, impact, harmful radiation, including visible light and UV/IR exposure
- Frameless design for an expansive, unobstructed field of view
- Offers Level B impact resistance (EN 166)
- Compatible with clear & IR5 polycarbonate lenses featuring anti-scratch coating
- Ratchet adjustment ensures a secure fit across various head sizes
- Padded headband provides enhanced comfort

IDEAL FOR USE IN

- Welding Operations
- Logistics
- Mining
- Grinding
- Construction
- Grinding, Risk of Splash
- Warehousing
- Carpentering

CERTIFIED TO

CE

EN 166:2001

FACE VISORS

Ref. FT 171(IR05)



Ref. FT 171(Clear)



CERTIFIED TO

CE

EN 166:2001

Engineered for safety and visibility, this visor features an optical-grade polycarbonate lens with Level B impact resistance (EN 166). It offers protection against molten metal splashes and is available in an IR5 version for welding applications. Designed for versatility, it seamlessly integrates with both Aluminium and Plastic cap frames.

FEATURES

- Optical grade polycarbonate lens
- Level B impact resistance (EN 166)
- Frameless design for a wide, unrestricted field of vision
- Protects against splashes of molten metal
- IR5 version available for welding application
- Compatible with Aluminium cap frame and Plastic cap frame

IDEAL FOR USE IN

- Welding
- General Industry
- Logistics
- Mining
- Warehousing
- Construction
- Carpentering
- Grinding
- Electric Welding

TECHNICAL DETAILS

Particulars	FT 171(IR05)	FT 171(CLEAR)
Lens Coating	Anti – fog, Anti – scratch	
Lens Marking	IR5 4-5 F1 BT 9 CE	Clear 2-1.2 F1 BT 9 CE

PROTEKTIVE WORKWEAR



KARAM offers a wide array of performance Workwear clothing, highly popular and ideally suited for use in industrial applications. Also, available in customized specifications as per the requirements of our esteemed customers, KARAM performance Workwear clothing is well tested on various quality parameters.

Scan here *for a virtual tour of the product*

Introduction to Protective Workwear

Protective Workwear includes items of Personal Protective Equipment (PPE) that are designed to keep the wearer safe from needless risk and danger. These risks and dangers can be related to fire, molten metal splashes, thermal hazards, biological pathogen, weather, toxic chemicals, puncture, contamination, electrical charge, or low visibility and should be provided with appropriate relevant clothing to mitigate risks.

The performance of Protective Workwear is dependent upon the material and design of construction. Items of safety apparel typically have a specific purpose and the garment may not be suitable for applications outside of the manufacturer's recommendation. Employers are required to assess occupational risks, provide PPE, and train employees in its usefulness. Safety clothing is generally a necessary last line of defense from peril from unforeseen circumstances and is one of the best ways of protecting workers from injury.

The protective clothing may take the form of aprons, coveralls, coats, pants, hats, hoods, sleeves, gloves, and fully encapsulating chemical protective suits.

Some of the characteristics in Protective Workwear that we need to keep in mind:

- Wool and specially treated cotton clothing are fire-resistant and comfortable.
- Heavy fabrics protect against cuts and bruises from heavy, sharp or rough materials.
- Synthetic materials may catch fire more easily.

The protective workwear material is designed for specific applications and performances therefore they are passed through various testing methods and certifications depending on the applications defined by the European Union (CE), United States (ANSI), India (BIS) to name a few.

Category I - KARAM Cotton Coveralls Vital Test Compliance

Sr. No.	Description	Test Method	Result Achieved
1.	Abrasion Resistance	EN 530 method 1	Light wear at 40,000 cycles
2.	Color Fastness to Light (Grade 4)	ISO 105 B02	4/5
3.	Color Fastness to Washing	ISO 105 C10	4/5
4.	Color Fastness to Perspiration	ISO 105 E04	4/5
5.	Color Fastness to Rubbing (Dry + Wet)	ISO 105 X12	3/4
6.	Dimensional Change after washing (Shrinkage)–5 Wash Cycles at 60^0C	ISO 5077/ISO 6330	Warp and Weft Shrinkage to less than 3%

This product line has been independently tested at the SATRA UK labs

EN 11612:2015 – IFR Coveralls Vital Test Compliance

Code Letter A1	Limited Flame Spread Performance Requirements ISO 15025 Procedure A
Code Letter A2	Limited Flame Spread Performance Requirements ISO 15025 Procedure B (Mainly for the Seams of the garments) - *Optional*
Code Letter B	Convective Heat
Code Letter C	Radiant Heat
Code Letter F	Contact Heat

TESTED & CONFORMS

CE **Category I**

REGULAR RANGE

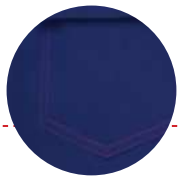
Ideal for use in general working conditions. Designed for an excellent fit and comfort of the wearer for longer durations, this KARAM workwear has been manufactured to the highest level of garment manufacturing standards. This range is equipped with 5 thread overlock and stress points are bar- tacked reinforced for increased tear strength. The Workwear fabric conforms to the highest level of colourfastness, seam slippage and tensile strength in its category.

Ref. PW 1101



Ref. PW 1201

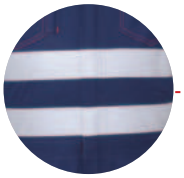




High-quality thread of contrast color used for stitching.



Highest quality concealed front zipper used in manufacturing.



2 Inch reflective tape on chest, back, arms and legs.



Elasticized waist for better fit.



Plain straight cuff.

Technical Snapshot								
Ref.	**Material**	**GSM**	**Chest Pockets**	**Side Opening Pockets and Hip Pocket**	**Tools Pocket**	**Piping**	**Pen and Spectacles Holder**	**Reflective Tape**
PW 1101	100% Cotton twill	GSM 200±5%	✓	✓	✓	✗	✓	✗
PW 1201	100% Cotton twill	GSM 200±5%	✓	✓	✓	✗	✓	✓

Colors available

Khakhi Royal Blue Red Orange Navy Blue

CE

Category I

*Note: There may be slight variations in the actual colour due to photos taken under different light conditions.
KARAM Protective Workwear are also available in 220/240/270/300 GSM on request.

PREMIUM RANGE

Ideal for use in general working conditions. Consists of contrast color lining for an added look good factor to the Workwear for senior executives in the company. The usage of 500 cd/lux reflective tape that does not degrade on every wash cycle is an added advantage. Designed for an excellent fit and comfort of wearing for longer durations, the Premium range of Workwear has been manufactured to the highest level of garment manufacturing standards. This range is equipped with 5 thread overlock and stress points are bar tacked reinforced for increased tear strength. The coverall fabric conforms to the highest level of color fastness, seam slippage and tensile strength in its category.

Ref. PW 2101





High-quality thread of contrast color used for stitching.



Highest quality concealed front zipper used in manufacturing.



Advance reflective tape design on the chest, back, arms and legs.

Ref. PW 2201





Elasticized waist for better fit.



Cuffs with snap button closure.



New design with contrast color piping on pockets and collar.

Technical Snapshot								
Ref.	**Material**	**GSM**	**Chest Pockets**	**Side Opening Pockets and Hip Pocket**	**Tools Pocket**	**Piping**	**Pen and Spectacles Holder**	**Reflective Tape**
PW 2101	100% Cotton twill	GSM 200±5%	✓	✓	✓	✓	✓	✗
PW 2201	100% Cotton twill	GSM 200±5%	✓	✓	✓	✓	✓	✓

Colors available

Primary- Navy Blue, Orange

Piping- Red, Navy Blue

CE Category I

*Note: There may be slight variations in the actual colour due to photos taken under different light conditions.
KARAM Protective Workwear are also available in 220/240/270/300 GSM on request.

Ref. PW 2102



Ref. PW 2202





Advance reflective tape design on chest, back, arms and legs.



High-quality thread of contrast color used for stitching.



Highest quality concealed front zipper used in manufacturing.



2-way Zipper



Cuffs with snap button closure.



New design with contrast color piping on pockets and collar.

Technical Snapshot								
Ref.	**Material**	**GSM**	**Chest Pockets**	**Side Opening Pockets and Hip Pocket**	**Tools Pocket**	**Piping**	**Pen and Spectacles Holder**	**Reflective Tape**
PW 2102	100% Cotton twill	GSM 200±5%	✓	✓	✓	✓	✓	✗
PW 2202	100% Cotton twill	GSM 200±5%	✓	✓	✓	✓	✓	✓

Colors available

Primary- Navy Blue, Orange

Piping- Red, Navy Blue

CE Category I

*Note: There may be slight variations in the actual colour due to photos taken under different light conditions.
KARAM Protective Workwear are also available in 220/240/270/300 GSM on request.

INHERENT FIRE RESISTANT RANGE

KARAM introduces the exclusive range of Flame Resistant Protective Workwear specially designed to protect the wearer from injury due to flames when exposed to flammable chemicals, solvents and arc flash hazards. Made from Inherent FR Fabric, this lightweight flame resistant garment offers great protection where there is a need for clothing with limited flame spread properties and where the user is exposed to contact with flame (Code A), convective heat (Code B), radiant heat (Code C) and contact heat (Code F).

The range is equipped with multi-functional pockets along with three stitches over locked seams with elasticated waist for best fit.

Stitched with FR thread, the range offers durability with compliance. Also, available with high visibility reflective tapes offering 360-degree reflectivity.

Ref. PWIFR 11011K

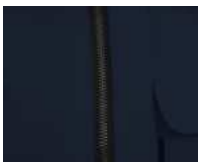


Ref. PWIFR 12011R





- Advance reflective tape design on the arms and legs.



- Highest quality concealed front Zipper



- Pen/Small Tool Holder



- Show Elasticated Waist



- Pockets on Chest, Back and Legs

Technical Snapshot							
Ref.	**Material**	**GSM**	**Chest Pockets**	**Hip Pocket**	**Tools Pocket**	**Side Pocket**	**Reflective Tape**
PWIFR 11011K	Inherent FR Fabric (93% Meta Aramid, 5% Para Aramid, 2% Anti-Static)	GSM 150±5%	✓	✓	✓	✓	✗
PWIFR 12011R	Inherent FR Fabric (93% Meta Aramid, 5% Para Aramid, 2% Anti-Static)	GSM 150±5%	✓	✓	✓	✓	✓

Colors available

Orange Navy Blue Khakhi *(Available on request)*

CE

EN ISO 13688:2013
EN ISO 11612:2015 (Ratings: A1, A2, B1, C1, F1
EN 1149-5:2018
IEC 61482-2:2018 (Rating: (4kA) APC=1)

*Note: There may be slight variations in the actual colour due to photos taken under different light conditions.

Ref. PWIFR 11021K



Ref. PWIFR 12021R





Advance reflective tape design on the arms and legs.



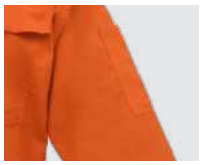
Brass Zipper



Elasticated Waist



Back Pocket with FR Velcro Closure Flap



Pen/Small Tool Holder

Technical Snapshot							
Ref.	**Material**	**GSM**	**Chest Pockets**	**Hip Pocket**	**Tools Pocket**	**Side Pocket**	**Reflective Tape**
PWIFR 11021K	Inherent FR Fabric (93% Meta Aramid, 5% Para Aramid, 2% Anti-Static)	GSM 150±5%	✓	✓	✓	✓	✘
PWIFR 12021R	Inherent FR Fabric (93% Meta Aramid, 5% Para Aramid, 2% Anti-Static)	GSM 150±5%	✓	✓	✓	✓	✓

Colors available

Orange | Navy Blue | Khakhi *(Available on request)*

CE

EN ISO 13688:2013
EN ISO 11612:2015 (Ratings: A1, A2, B1, C1, F1
EN 1149-5:2018
IEC 61482-2:2018 (Rating: (4kA) APC=1)

*Note: There may be slight variations in the actual colour due to photos taken under different light conditions.

GET YOUR WORKWEAR CUSTOMIZED AS PER YOUR NEED

Customizing Workwear is an innovative way to identify yourself and portray a professional image. We have an in-house customization team to provide various options wherein you can choose or provide your specifications for coveralls, shirts, trousers, jackets, tunics, scrubs etc. The other things that can be added are your name, title, or a company logo which's your very own brand identity. Additionally, you can choose different types of logo customization options.

- Embroidery
- Screen Printing
- Heat Press
- Woven Labels and Rubberized Labels

***Customised Logo**
as per your requirement



Protective Workwear



Shirts



Jackets



Trousers

WASH CARE GUIDE

Wash the garment inside out and dry separately



Machine Wash at 30°c



Do Not Wring



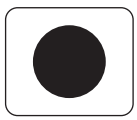
No Chlorine Bleach



Do Not Tumble Dry



Max Iron Temp at 110°c



Dry Clean

SIZE CHART- BODY DIMENSIONS

	A	B
Garment Size	**Body Height (cm)**	**Chest Width (cm)**
S	164-170	84-92
M	170-176	92-100
L	176-182	100-108
XL	182-188	108-116
XXL	188-194	116-124
XXXL	194-200	124-132

Note that these sizes relate to the body size of the wearer and not actual garment dimensions

NEW

FRONTIER™
Protective Workwear



SAFETY LEG GUARD
Ref. FT861(UL)(GY)(12)

FEATURES

- Made from high-quality split leather
- Heat-resistant upto 100°C for 15 seconds
- Velcro closure for easy removal
- Provides protection against sparks and hot particle splashes

IDEAL FOR USE IN

- Iron and Steel
- Manufacturing
- Metal
- Mining
- Furnace

COMPLIES TO

EN 388:2016, EN 407:2020



LEATHER APRON
Ref. FT871(UL)(GY)(90)

FEATURES

- Protects against sparks and hot particle splashes
- Made from high-quality split leather
- Comes with a textile strap and easy-to-remove plastic buckle
- Available with optional cotton lining Ref. FT871(GY)(90)

IDEAL FOR USE IN

- Iron and Steel
- Manufacturing
- Metal
- Mining
- Furnace

COMPLIES TO

EN 388:2016, EN 407:2020

TECHNICAL DETAILS

Product Code	Construction	Upper Material	Liner Material	Thread	Color	Length
FT 861(UL)(GY)(12)	Cut and Sewn	Split Leather	Unlined	Polyester	Grey	12 Inches
FT 871(UL)(GY)(90)	Cut and Sewn	Split Leather	Unlined or Cotton lined	Polyester	Grey	60X90 cm

NOTE

HAND PROTEKTION



KARAM offers a range of Gloves that can be worn by the user under different working conditions. The recommendations are based on the different manufacturing styles of these Gloves, along with their different make-material and coatings, besides the different tests that these Gloves pass.

EN Standards for Safety Gloves

KARAM Safety Gloves are tested and certified to the latest norms for mechanical resistance as per EN 388:2016.

EN 420:2003 - This standard defines the general requirements for Protective Gloves in terms of construction, fitness, purpose, safety, etc.

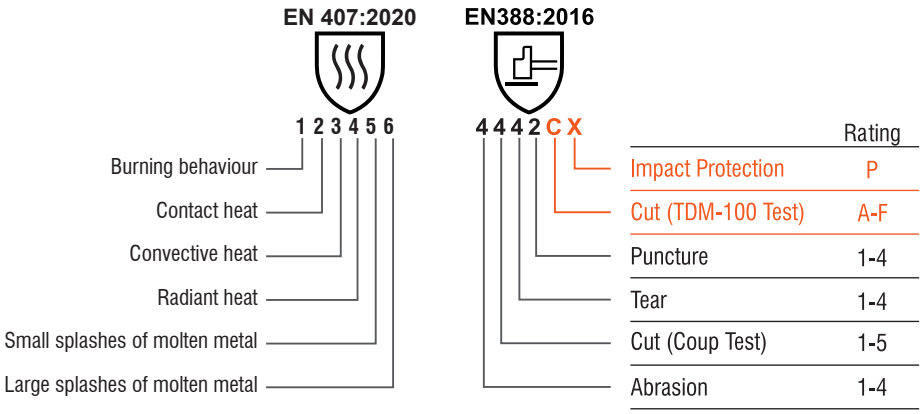
EN 388:2016 - This standard specifies the capability of the Gloves to protect the user against mechanical hazards, like abrasion, cut, tear, puncture, etc. Under this new standard EN 388:2016, KARAM Safety Gloves are tested for cut resistance through a more stringent TDM method, making them better in performance.

EN 407:2020 - This standard specifies the test methods for protective gloves that shall protect against heat and/or fire.

Performance level as per EN 388:2016					
Test	**1**	**2**	**3**	**4**	**5**
Abrasion resistance **(No. of rubs)**	100	500	2000	8000	-
Blade cut resistance (index)	1.2	2.5	5.0	10.0	20.0
Tear resistance (Newton)	10	25	50	75	-
Puncture resistance (Newton)	20	60	100	150	-

Performance level as per EN 388:2016						
Test	**A**	**B**	**C**	**D**	**E**	**F**
EN ISO Cut Resistance (Newton)	2	5	10	15	22	30
EN Impact Protection	Pass (P) or Fail (No Marking)					

Note : The letter X means that "not tested" or "not applicable"



Testing

TESTED & CERTIFIED

CE



STRAIGHT BLADE CUT RESISTANCE TEST



TEAR AND PUNCTURE RESISTANCE TEST

SUPPORTED/MECHANICAL RESISTANT GLOVES

KARAM supported/mechanical resistant gloves protects the hands against mechanical hazards, like cut, abrasion, etc. This range by KARAM has the following unique features:

- Provides ergonomic protection for good grip, dexterity and comfort.
- Created for a broad range of general working applications such as handling and carrying in dry and wet conditions.
- Different coatings to suit various work conditions and applications.
- Tested to latest norm EN 388:2016 for abrasion resistance, cut, tear and puncture.
- Superior ergonomics with finest quality and finish.



EN 388: 2016

3131X

Ref. Ref. HS 01 (Orange Liner with Black Crinkle Latex Coating)

IDEAL FOR USE

In light to medium parts handling, construction material handling, maintenance work and warehousing.

DESCRIPTION

- Has a high abrasion and tear resistance due to its more dense construction.
- Made of unique orange and black combination for better aesthetics.
- The crinkle latex coating provides an excellent grip and good mechanical performance for protection and durability.

CERTIFIED TO

EN 388:2016

CE

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
3	1	3	1	X

NEW



EN 388: 2016

2131X

Ref. HS 02 (Polyster Liner with Natural Latex Coating)

IDEAL FOR USE

In dry and wet environments like general purpose, vehicle maintenance, material handling and refuse collection.

DESCRIPTION

- Lightweight latex coated gloves for optimum dexterity, fit and comfort.
- Has a high abrasion and tear resistance due to its more dense construction.
- Made of unique brown and black combination for better aesthetics.
- The crinkle latex coating provides an excellent grip and good mechanical performance for protection and durability.

CERTIFIED TO

EN 388:2016

CE

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
2	1	3	1	X

NEW



EN 388: 2016

2142X

HS 03 (Polycotton Liner with Natural Latex Coating)

IDEAL FOR USE

In handling bricks & tiles, bricklaying, concrete work, plumbing work, general handling, refuse collection and gardening.

DESCRIPTION

- Robust latex gloves offering great dexterity, outstanding grip and good resistance to tearing.
- Has a high abrasion and tear resistance due to its more dense construction.
- Made of unique dark blue and light blue combination for better aesthetics.
- The crinkle latex coating provides an excellent grip and good mechanical performance for protection and durability.

CERTIFIED TO

EN 388:2016

CE

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
2	1	4	2	X



EN 388: 2016

3131X

Ref. HS 11 (White Liner with Orange Crinkle Latex Coating)

IDEAL FOR USE

In light to medium parts handling, vehicle maintenance, general maintenance work, handling of slippery plastics, tiles and ceramics.

DESCRIPTION

Comes with more than 70% of the back of the hand area dipped in protective coating, including fully coated thumb, hence offers high level of protection.

CERTIFIED TO

EN 388:2016

CE

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
3	1	3	1	X



EN 388: 2016

3131X

Ref. HS 21 (White Liner with White PU Coating)

IDEAL FOR USE

In small parts assembly such as bearings, springs etc., assembly of electrical components, microprocessor handling, medicine manufacturing, automotive industry and OEM manufacturers.

DESCRIPTION

- Offers excellent grip, dexterity along with a comfortable fit.
- Low lint gloves as its made from 100% polyester yarn.

CERTIFIED TO

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
3	1	3	1	X

CE

EN 388:2016



EN 388: 2016

3131X

Ref. HS 22 (Black Liner with Black PU Coating)

IDEAL FOR USE

In assembly of electrical components, microprocessor handling, medicine and cosmetics preparation, automotive industry and OEM manufacturers.

DESCRIPTION

- Offers excellent grip, dexterity along with a comfortable fit.
- Low lint gloves as its made from 100% polyester yarn.

CERTIFIED TO

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
3	1	3	1	X

CE

EN 388:2016

NEW



EN 388: 2016

3121X

HS 23 (Polyester Liner with Polyurethane Coating)

IDEAL FOR USE

In small components assembly, general handling, inspecting & packing, quality control, warehousing and operating machinery.

DESCRIPTION

- Has a high abrasion resistance.
- **Made of white color for better aesthetics.**
- Offers good grip in dry and mild oily conditions.

CERTIFIED TO

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
3	1	2	1	X

CE

EN 388:2016

NEW



EN 388: 2016
3121X

Ref. HS 24 (Polyester Liner with Polyurethane Coating)

IDEAL FOR USE

In small components assembly, general handling, inspecting & packing, quality control, warehousing and operating machinery.

DESCRIPTION

- Has a high abrasion resistance.
- **Made of black color for better aesthetics.**
- Offers good grip in dry and mild oily conditions.

CERTIFIED TO

EN 388:2016

CE

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
3	1	2	1	X



EN 388: 2016
4121X

Ref. HS 31 (White Liner with Grey Nitrile Coating)

IDEAL FOR USE

In small parts assembly such as bearings, springs etc. assembly of electrical components, minor maintenance tasks and warehousing.

DESCRIPTION

- Low lint gloves as its made from 100% polyester yarn.
- Offers good grip when handing oil based components.

CERTIFIED TO

EN 388:2016

CE

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	1	2	1	X

NEW



EN 388: 2016
4121X

Ref. HS 32 (Polyester Liner with Nitrile Coating)

IDEAL FOR USE

In general handling, product assembly, light fabrication, warehouse work, packaging and gardening.

DESCRIPTION

- A flexible and durable flat nitrile palm coating work gloves.
- Has a high abrasion and tear resistance due to its more dense construction.
- Made of unique white and grey combination for better aesthetics.
- Excellent grip in dry and oily environment.

CERTIFIED TO

EN 388:2016

CE

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	1	2	1	X

NEW



EN 388: 2016
4121X

Ref. HS 33 (Polyester Liner with Nitrile Coating)

IDEAL FOR USE

In machining / handling oily parts, assembly of parts, goods handling, light fabrication, quality inspection and warehousing.

DESCRIPTION

- A flexible and durable flat nitrile palm coating work gloves.
- Has a high abrasion and tear resistance due to its more dense construction.
- Knit wrist and elastic hem allow for a snug fit around wrist to keep debris out of the glove.
- Made of unique black and lilac combination for better aesthetics.
- Advanced nitrile coating enhances grip in dry and oil applications and provides good abrasion resistance.

CERTIFIED TO

EN 388:2016

CE

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	1	2	1	X

NEW



EN 388: 2016
4121X

Ref. HS 34 (Polyester Liner with Nirile Sponge Coating)

IDEAL FOR USE

In assembly / machining, handling oily parts, light fabrication, quality inspection, warehousing and goods handling.

DESCRIPTION

- Patented nitrile sponge palm coating enhances grip and durability.
- Sanitized antimicrobial finish provides extra freshness.
- Light heat protection upto 100°C for short period.
- Made of unique black and grey combination for better aesthetics.

CERTIFIED TO

EN 388:2016

CE

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	1	2	1	X

Ref. HS 41 (HPPE Liner with Grey PU Coating)



EN 407: 2020
X1XXXX
EN 388: 2016
4243B

IDEAL FOR USE

In handling sharp objects, good for engineering, steel and automotive industry, handling of glass and metal sheets, and assembly tasks that require cut protection.

DESCRIPTION

- Offers excellent protection to the hands while working with sharper and provides greater force in harsher environments because it passes the stringent cut resistance test as per the new standard.
- Provides protection against thermal risks (heat and/or fire) as the glove passes contact heat test of EN 407:2020 clause no. 4.5.3
- The unique HPPE nylon spandex blended fiber of this Glove offers excellent fit, better dexterity and high levels of elasticity.

CERTIFIED TO

EN 388:2016, EN 407:2020

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	2	4	3	B

CE
EN 388:2016
EN 407:2020

NEW

Ref. HS 43 (HPPE Liner with Black Nitrile Micro Foam Coating)



EN 388: 2016
4X42B

IDEAL FOR USE

In handling sharp objects, horticulture, good for engineering, steel and automotive industry, handling of glass and metal sheets, and assembly tasks that require cut protection.

DESCRIPTION

- Nitrile micro foam coating gives excellent grip to the gloves, especially in wet or oily conditions.
- Absorbs excess liquid from surfaces to keep hands dry and cool.
- The unique 13 Gauge HPPE spandex blended fiber of these gloves offers excellent fit, better dexterity and high levels of elasticity.

CERTIFIED TO

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	X	4	2	B

CE
EN 388:2016

NEW



EN 388: 2016

4342B

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	3	4	2	B

Ref. HS 44 (HPPE/Glass Liner with Polyurethane Coating)

IDEAL FOR USE

In sheet metal processing, fabrication, maintenance & repair, trimming, auto component assembly, bottling or canning, body shop works, vehicle repair and auto assembly.

DESCRIPTION

- Comfortable PU coated cut-resistant gloves for mechanical activities.
- Made of grey color for better aesthetics.
- Exceptional flexibility and tactile sensitivity.

CERTIFIED TO

EN 388:2016

CE

EN 388:2016

NEW



ANSI 4 Abrasion

ANSI A2 Cut

EN 407:2020 X1XXXX

EN 388: 2016

4X31B

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	X	3	1	B

Ref. HS 46 (HPPE, Glass, Nylon & Spandex Plaited Composite Knitted Liner with KTCR and NFT coating)

IDEAL FOR USE

In automotive industry, materials handling & assembly, light fabrication & manufacturing, steel mining, quality inspection & horticulture.

DESCRIPTION

- Lightweight cut-resistant gloves that offer superior tactility, dexterity & flexibility.
- Highly durable NFT™ coating and liner with reinforced thumb & fore-finger(KTCR) greatly extends glove life.
- Cut level - synthetic composite liner provides cut level B protection.
- NFT™ coating enables air diffusion to release heat for 360° breathability.
- Ergonomic design allows minimum hand fatigue and superior tactile sensitivity.
- Made of unique grey melange and black colour combination for better aesthetics.
- Comes with touch compatibility for easy use of electronic devices and data entry/through conductive fibre in the glove liner tips.
- Provides protection against thermal risks (heat and/or fire) as the glove passes contact heat test of EN 407:2020 clause no. 4.5.3

CERTIFIED TO

EN 388:2016, EN407:2020, ANSI A2, ANSI 4

CE

EN 388:2016, EN 407:2020



EN 407:2020
X1XXXX

EN 388: 2016
4443C

Ref. HS 51 (HPPE Liner with Black PU Coating)

IDEAL FOR USE

In metal fabrication, steel and automotive industry, handling of glass and metal sheets, ceramic industry, aerospace and transportation.

DESCRIPTION

- This glove is constructed of unique high cut resistant fiber, which offers strong protection with the highest level of hand protection against sharp objects like glass, metal sheets etc.
- Provides protection against thermal risks (heat and/or fire) as the glove passes contact heat test of EN 407:2020 clause no. 4.5.3

CERTIFIED TO

EN 388:2016, EN 407:2020

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	4	4	3	C

CE
EN 388:2016
EN 407:2020

NEW



EN 388: 2016
4X42C

Ref. HS 52 (HPPE Liner with Black Nitrile Micro Foam Coating)

IDEAL FOR USE

In metal fabrication, steel and automotive industry, handling of glass and metal sheets, ceramic industry, aerospace, and transportation

DESCRIPTION

- This glove is constructed of unique high cut resistant fiber, which offers strong protection with the highest level of hand protection against sharp objects like glass, metal sheets, etc.
- Nitrile micro foam coating gives excellent grip to these gloves, especially in wet or oily conditions.
- Absorbs excess liquid from surfaces to keep hands dry and cool.
- The unique 13 gauge HPPE spandex blended fiber of this glove offers excellent fit, better dexterity and high levels of elasticity.

CERTIFIED TO

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	X	4	2	C

CE
EN 388:2016

NEW



ANSI 4 Abrasion

ANSI A3

EN 388: 2016 4X42C

Ref. HS 53 (HPPE, Glass, Nylon & Spandex Plaited Composite Knitted Liner with NFT Coating)

IDEAL FOR USE

In mining, construction & infrastructure, automotive, manufacturing & goods handling, quality inspection, assembly & maintenance.

DESCRIPTION

- Lightweight cut-resistant gloves that offer superior tactility, dexterity & flexibility.
- Ultra-lightweight & coating feels like a second skin and provides maximum comfort.
- Provides excellent grip in oily, dry and wet condition.
- NFT™ coating enables air diffusion to release heat for 360° breathability.
- High performance engineered liner for cut level C resistance.
- Made of unique white blue melange and black colour combination for better aesthetics.
- Comes with touch compatibility for easy use of electronic devices and data entry/through conductive fibre in the glove liner tips.
- Available in sizes: S (yellow band), M (white band), L (black band), XL (orange band), 2XL (green band) & 3XL (brown band).

CERTIFIED TO

EN 388:2016, ANSI A3, ANSI 4, AS/NZS 2161.3 2020

AS/NZS 2161.3 2020 EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	X	4	2	C



EN 407:2020 X3XXXX

EN 388: 2016 4543D

Ref. HS 61 (HPPE Liner with Blue Latex Coating)

IDEAL FOR USE

In handling sharp objects, good for engineering, steel and automotive industry, handling of glass and metal sheets and in assembly tasks that require cut protection.

DESCRIPTION

- It offers the highest protection to the hands while working with sharper objects and provides greater force in harsher environments because it passes the stringent cut resistance test as per the new standard.
- The unique HPPE blended fiber of this glove offers excellent fit, better dexterity and high levels of elasticity
- Has unique cross pattern latex coating for excellent grip.
- Provides protection against thermal risks (heat and/or fire) as the glove passes contact heat test of EN 407:2020 clause no. 4.5.3

CERTIFIED TO

EN 388:2016, EN 407:2020

EN 388:2016
EN 407:2020

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	5	4	3	D

NEW



EN 388: 2016
4X42D

Ref. HS 62 (HPPE / Glass Liner with Polyurethane Coating)

IDEAL FOR USE

In handling sharp and greasy parts, sheet metal handling, product assembly, machining, bodyworks, precision mechanics, metal stamping and glass handling.

DESCRIPTION

- Outstanding cut resistant and optimized for comfort, dexterity, cut resistance and tactile sensitivity.
- Made of grey color for better aesthetics.
- Polyurethane palm coating provides rough grip with a high degree of comfort and controlto performintricate tasks.
- Elasticated knit wrist cuff prevents dirt and debris from entering the glove.
- Exceptional flexibility and tactile sensitivity.

CERTIFIED TO

EN 388:2016

CE
EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	X	4	2	D

NEW



EN 407:2020
X1XXXX

EN 388: 2016
4X32D

Ref. HS 64 (Composite Ricotech Liner with Nitrile Sponge)

IDEAL FOR USE

In sheet metal operation, glass handling, panel fixing, ceramics handling, automotive assembly, tyre handling, bottling and canning.

DESCRIPTION

- Good protection from oils, hydrocarbons and grease.
- Made of unique black, grey & green melange combination for better aesthetics.
- Nitrile sponge coating enhances grip in dry and oily environments.
- Provides protection against thermal risks (heat and/or fire) as the glove passes contact heat test of EN 407:2020 clause no. 4.5.3

CERTIFIED TO

EN 388:2016, EN 407:2020

CE
EN 388:2016
EN 407:2020

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	X	3	2	D

NEW



EN 388: 2016

4X42D

Ref. HS 65DD (HPPE Liner with Sandy Nitrile Over Flat Nitrile Coating)

IDEAL FOR USE

In sharp & oily parts handling, mechanical & engineering, oil & gas piping, cable sealing, mounting and dismantling and heavy equipment handling.

DESCRIPTION

- HPPE blended shell is lightweight and thin, offering exceptional cut resistance (level D) and durability.
- Double-dipped nitrile coating on the full hand helps to keep fluids out, extends the life of the glove and provides excellent abrasion resistance.
- Made of unique orange and black combination for better aesthetics.
- Nitrile sandy coatings are impermeable providing an elevated grip in dry and oily conditions.

CERTIFIED TO

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	X	4	2	D

CE

EN 388:2016

NEW



EN 388: 2016

3X42D

Ref. HS 68 (HPPE / Glass Liner with Natural Latex Coating)

IDEAL FOR USE

In metal fabrication, paper manufacturing, plastics and molding, glass handling, bottling and canning, appliance manufacturing and construction.

DESCRIPTION

- Has a high abrasion, puncture and tear resistance due to its more dense construction.
- Made of unique black and white melange combination for better aesthetics.
- Natural rubber palm coating with crinkle finish.

CERTIFIED TO

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
3	X	4	2	D

CE

EN 388:2016

NEW



EN 388: 2016
4X4XD

Ref. HS 69 (HPPE / Glass Liner)

IDEAL FOR USE

In handling parts with sharp & rough edges, assembly and inspection of components, inspection of equipment, body surface checking, final inspection and maintenance.

DESCRIPTION

- Resilent cut-resistant glove offering comfort and flexibility.
- Knit wrist helps prevent dirt and debris from entering the glove.
- Made of unique white and black melange combination for better aesthetics.

CERTIFIED TO

EN 388:2016

CE
EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	X	4	X	D

Ref. HS 82 (Fine gauge HPPE/Nylon/Spandex/Steel composite Knitted Liner with NFT coating)

NEW



ANSI 4 Abrasion
ANSI A6
EN 388: 2016
4X42F

IDEAL FOR USE

In construction & mining, machinery & equipment, oil & gas, fabrication, sheet metal work, glazing, maintenance, timber & forestry and scaffolding.

DESCRIPTION

- Solid cut resistance (level F) with excellent dry and oil grip, offering exceptional dexterity for precision handling.
- Touchscreen compatable. proprietary fine gauge liner feels like a second skin.
- Provides superior grip in oily, dry and wet conditions. Superior cut F resistance, 360° protection.
- NFT™ coating enables air diffusion to release heat for 360° breathability.
- Thumb and forefinger reinforcement plus NFT ™coating for high abrasion resistance.
- Made of unique green and black colour combination for better aesthetics.
- Comes with touch compatibility for easy use of electronic devices and data entry/through conductive fibre in the glove liner tips.
- Available in sizes: S (yellow band), M (white band), L (black band), XL (orange band), 2XL (green band) & 3XL (brown band).

CERTIFIED TO

EN 388:2016, ANSI A6, ANSI 4

CE
EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	X	4	2	F

NEW



EN 388:
2016
4121X

Ref. HS 91 (Red Polyester Liner with Black Nitrile Fully Coated with Smooth Finish)

IDEAL FOR USE

In assembly of oily parts, light metal fabrication, maintenance, grinding, general handling, automotive , construction,transport, machinery and equipment and public utilities

DESCRIPTION

- Fully coated nitrile provides protection from non hazardous solvents.
- Offers complete hand protection against liquids and oils.
- Lint-free design minimizes the risk of product contamination.
- Elasticated wrist ensures a secure fit.
- Seamless liner enhances comfort and prevents irritation.

CERTIFIED TO

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	1	2	1	X

CE
EN 388:2016

NEW



EN 388:
2016
4121X

Ref. HS 92 (FC) (Polyester Liner with Nitrile Coating)

IDEAL FOR USE

In assembly of oily parts, light metal fabrication, quality control, maintenance, machining, grinding and general handling.

DESCRIPTION

- Fully coated nitrile provides protection from non hazardous solvents.
- Full hand protection against liquid and oil.
- Made of unique black and blue combination for better aesthetics.
- Seamless liner prevents irritation.

CERTIFIED TO

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	1	2	1	X

CE
EN 388:2016

NEW



EN 388: 2016

4121X

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	1	2	1	X

Ref. HS 93 (DD) (Polyster Liner Sandy Nitrile Over Flat Nitrile Coating)

IDEAL FOR USE

In oily parts handling, machining, engine & gear assembly and maintenance.

DESCRIPTION

- Comes with more than 70% of the back of the hand area dipped in protective coating, including fully coated thumb, hence offers high level of protection.
- Double layer nitrile coating keeps hands dry and comfortable when handling oily parts and tools.
- Supple and soft 15 gauge liner provides excellent finger tips sensitivity.
- Nitrile sandy finish on palm offering excellent grip in dry and oily conditions.
- Made of unique grey and black combination for better aesthetics.

CERTIFIED TO

EN 388:2016

CE

EN 388:2016

Technical Snapshot							
Ref.	Composition				Cuff Style	Thickness	Size
	Coating Material	Coating Color	Liner Material	Grip Surface			
HS 01	Latex	Black	Polyester	Crinkled Palm Coated	Straight with beaded overlock thread and white elastic in the cuff area.	13 gauge	M, L and XL
HS 02				NA	Knit Wrist		M and L
HS 03		Blue	Polycotton	NA	Knit Wrist	10 gauge	M and L
HS 11		Orange	Polycotton	Crinkle Palm Coated with back ¾ Dip	Straight with beaded overlock thread and white elastic in the cuff area.	10 gauge	M and L
HS 21	Polyurethane(PU)	White	Polyester	Smooth palm dipped		13 gauge	M, L and XL
HS 22		Black					
HS 23	Polyurethane	White		NA	Knit Wrist		M and L
HS 24		Black		NA	Knit Wrist		M and L
HS 31	Nitrile	Grey		Smooth palm dipped	Straight with beaded overlock thread and white elastic in the cuff area.		M, L and XL
HS 32	Nitrile	White	Polyester	NA	Knit Wrist		M and L
HS 33		Lilac		NA	Knit Wrist		M and L
HS 34	Nitrile Sponge	Black		NA	Knit Wrist		M and L
HS 41	Polyurethane(PU)	Grey	HPPE	Smooth palm dipped	Straight with overlock thread beaded cuff area.		M, L and XL
HS 43	Nirile Micro Foam	Black		NA	Knit Wrist		
HS 44	Polyurethane	Grey	HPPE / Glass	NA	Knit Wrist		XS, S, M and L
HS 46	NFT	Black	HPPE / Glass	NA	NA		S, M, L, XL, 2XL and 3XL
HS 51	Polyurethane(PU)	Black	HPPE	Smooth palm dipped	Straight with overlock thread beaded cuff area.		M, L and XL
HS 52	Nirile Micro Foam	Black	HPPE	NA	Knit Wrist		M, L and XL
HS 53	NFT			Smart Grip	NA		S, M, L, XL, 2XL and 3XL
HS 61	Embossed Latex	Blue		Textured palm dipped	Straight with overlock thread beaded cuff area.		M, L and XL
HS 62	Polyurethane	Grey	HPPE / Glass	NA	Knit Wrist		S, M, L and XL
HS 64	Nitrile Sponge	Black	Composite Ricotech				M and L
HS 65DD	Sandy Nitrile Over Flat Nitrile	Orange & Black	HPPE			15 gauge	
HS 68	Natural Latex	Black	HPPE / Glass			13 gauge	M, L and XL
HS 69	NA	Grey					L
HS 82	NFT	Black		Smart Grip			
HS 91	Nitrile	Black	Polyester	NA		15 gauge	M and L
HS 92 (FC)	Nitrile						
HS 93 DD	Sandy Nitrile Over Flat Nitrile	Grey/ Black					

MULTIPURPOSE - HEAVY DUTY

Designed for tough applications, KARAM Heavy Duty Gloves provide superior protection, durability, and grip. Ideal for handling rough and abrasive materials, they offer excellent resistance to cuts, punctures, and abrasions. Built for comfort and longevity, these gloves ensure maximum safety in demanding environments.

NEW



EN 388: 2016
3111X

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
3	1	1	1	X

Ref. HS 201(KW) (Cotton Jersey Liner with Nitrile Coating)

IDEAL FOR USE

In glass and sheet metal handling, raw wood handling, metal grinding & lathe works, handing low cut materials, handling oily large objects, primary assembly, brick making and brick handling.

DESCRIPTION

- **Nitrile fully coated cut & sewn gloves for better grip and oil repellent.**
- Made of unique blue and white color combination for better aesthetics.
- Outstanding abrasion resistance and a great oil repellant.

CERTIFIED TO

EN 388:2016

CE
EN 388:2016

NEW



EN 388: 2016
3111X

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
3	1	1	1	X

Ref. HS 201(SC) (Cotton Jersey Liner with Nitrile Coating)

IDEAL FOR USE

In glass and sheet metal handling, raw wood handling, metal grinding & lathe works, handing low cut materials, handling oily large objects, primary assembly, brick making and brick handling.

DESCRIPTION

- **Nitrile fully coated glove with cotton cut and sewn jersey liner and safety cuff.**
- Made of unique blue and white color combination for better aesthetics.
- Outstanding grip in dry, wet and oily environments.

CERTIFIED TO

EN 388:2016

CE
EN 388:2016

NEW



EN 407:2020
X1XXXX

EN 388: 2016
4242B

Ref. HS 47 (Nylon / Polyester Liner with Nitrile Coating)

IDEAL FOR USE

In heavy metal processing, heavy machining / fabrication, oil drum handling, scrap handling, maintenance, brick making and construction.

DESCRIPTION

- **Heavy-duty Nylon seamless shell with nitrile fully coated glove.**
- Made of unique blue color for better aesthetics.
- The special nitrile formulation combines oil / liquid repellence, mechanical protection light chemical protection and flexibility.

CERTIFIED TO

EN 388:2016, EN 407:2020

CE
EN 388:2016
EN 407:2020

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	2	4	2	B

Technical Snapshot

Ref.	Composition				Cuff Style	Thickness	Size
	Coating Material	Coating Color	Liner Material	Grip			
HS 201(KW)	Nitrile	Blue	Cotton Jersey	NA	Knit Wrist	NA	L
HS 201(SC)					Safety Cuff		
HS 47			Nylon / Polyester		Integrated Knit		

ARM PROTECTION

Arm protection sleeves are designed for industrial use to shield workers' arms from hazards like cuts, abrasions, heat, and chemical exposure. Made from durable material, these gloves provide safety and comfort, ensuring workers can perform tasks while minimizing injury risks.

NEW



EN 388: 2016
1343C

EN 407:2020
X1XXXX

Ref. HS 701(18)TH and HS 701(22)TH

IDEAL FOR USE

In assembly and finishing, stamping operation, body shop works, glass repair and sheet metals handling.

DESCRIPTION

- Lightweight and non-irritating sleeves made with 100% genuine Kevlar® fiber.
- Knitted two-ply Kevlar® sleeves with thumb hole to protect the forearm against cut and contact heat.
- Made of unique yellow color for better aesthetics.
- The sleeves features a convenient thumb hole for a snug fit and improved wrist protection.
- Provides protection against thermal risks (heat and/or fire) as the glove passes contact heat test of EN 407:2020 clause no. 4.5.3
- Available in 18 and 22 inches variants.

CERTIFIED TO

EN 388:2016, EN 407:2020

CE
EN 388:2016
EN 407:2020

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
1	3	4	3	C

NEW



EN 388: 2016
3X42C

Ref. HS 702(18) (HPPE / Glass Liner)

IDEAL FOR USE

In handling parts with sharp and rough edges, assembly and inspection of components, inspection of fg equipment, body surface checking, marking and touching up, final inspection, maintenance, sheet metal, stamping, glass handling and bottling.

DESCRIPTION

- HPPE/Glass knitted TDM-level C sleeves, 18 inches long.
- Excellent protection against cut with high comfort and dexterity.
- Made of unique blue color for better aesthetics.
- Lightweight, seamless knitted shell made with high performance fibers.

CERTIFIED TO

EN 388:2016

CE
EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
3	X	4	2	C

NEW



EN 388:
2016

3X42C

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
3	X	4	2	C

Ref. HS 702(18)TH (HPPE / Glass Liner)

IDEAL FOR USE

In handling parts with sharp and rough edges, assembly and inspection of components, inspection of equipment, body surface checking, maintenance.

DESCRIPTION

- HPPE/Glass knitted TDM-Level C sleeves with thumb hole.
- Excellent protection against cut with high comfort and dexterity.
- Made of unique blue color for better aesthetics.
- Lightweight, seamless knitted shell made with high performance fibers.
- Available in 18 inches.

CERTIFIED TO

EN 388:2016

CE

EN 388:2016

NEW



EN 388:
2016

1433X

EN 407:2020

X1XXXX

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
1	4	3	3	X

Ref. HS 703(18)TH AND HS 703(22)TH

IDEAL FOR USE

In assembly and finishing, stamping operation, body shop works, glass repair and sheet metals handling.

DESCRIPTION

- Knitted two-ply Para-aramid sleeves with thumb hole, to protect the forearm against cut and contact heat.
- Made from 100% Para-aramid yarn, provides both cut and heat resistance.
- Thumb hole to hold the sleeve in position.
- Made of unique yellow color for better aesthetics.
- Short staple fibers in the gloves provide good comfort and performance.
- Provides protection against thermal risks (heat and/or fire) as the glove passes contact heat test of EN 407:2020 clause no. 4.5.3
- Available in 18 and 22 inches.

CERTIFIED TO

EN 388:2016, EN 407:2020

CE

EN 388:2016
EN 407:2020

NEW



EN 388: 2016
1433X

EN 407:2020
X1XXXX

Ref. HS 704(18)TH and HS 704(22)TH

IDEAL FOR USE

In assembly and finishing, stamping operation, body shop works, glass repair and sheet metals handling.

DESCRIPTION

- Knitted two-ply Para-Aramid sleeves with thumb hole, to protect the forearm against cut and contact heat.
- Made from 100% Para-Aramid yarn, provides both cut and heat resistance.
- Thumb hole to hold the sleeve in position.
- Made of unique black color for better aesthetics.
- Short staple fibers in the gloves provide good comfort and performance.
- Provides protection against thermal risks (heat and/or fire) as the glove passes contact heat test of EN 407:2020 clause no. 4.5.3
- Available in 18 and 22 inches.

CERTIFIED TO

EN 388:2016, EN 407:2020

CE
EN 388:2016
EN 407:2020

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
1	4	3	3	X

Technical Snapshot

Ref.	Composition				Cuff Style	Thickness	Size
	Coating Material	Coating Color	Liner Material	Grip			
HS 701(18)TH	NA	NA		NA	NA	NA	18 inches
HS 701(22)TH							22 inches
HS 702(18)		NA	HPPE / Glass		Knit Wrist		18 inches
HS 702(18)TH			HPPE / Glass				
HS703(18)		NA	Para-Aramid		NA		18 inches
HS703(22)							22 inches
HS704(18)		NA					18 inches
HS704(22)							22 inches

CUT AND HEAT PROTECTION

KARAM range of cut and heat gloves that protects the hands against cut and heat applications like to work/handle hot objects 100°C, automotive assembly, packaging area with risk of cut, wire and cable handling, metal handling and glass handling, etc.

NEW



EN 407:2020
X1XXXX

EN 388: 2016
2442X

Ref. HS 401 (Kevlar Liner)

IDEAL FOR USE

To work / handle hot objects 100°C, automotive assembly, packaging area with risk of cut, wire and cable handling, metal handling and glass handling.

DESCRIPTION

- **Made with genuine Kevlar® fibe .**
- The best combination of cut protection and contact heat protection.
- Made of unique yellow color for better aesthetics.
- Ambidextrous, can be worn on either right or left hand.
- Provides protection against thermal risks (heat and/or fire) as the glove passes contact heat test of EN 407:2020 clause no. 4.5.3

CERTIFIED TO

EN 388:2016, EN 407:2020

CE

EN 388:2016
EN 407:2020

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
2	4	4	2	X

NEW



EN 407:2020
X1XXXX

EN 388: 2016
2X43E

Ref. HS 402 (Para-Aramid Liner)

IDEAL FOR USE

To work / handle hot objects 100°C, automotive assembly, packaging area with risk of cut, wire and cable handling, metal handling and glass handling.

DESCRIPTION

- **Made from Para-Aramid liner.**
- The best combination of cut protection and contact heat protection.
- Made of unique yellow color for better aesthetics.
- Ambidextrous, can be worn on either right or left hand.
- Provides protection against thermal risks (heat and/or fire) as the glove passes contact heat test of EN 407:2020 clause no. 4.5.3

CERTIFIED TO

EN 388:2016, EN 407:2020

CE

EN 388:2016
EN 407:2020

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
2	X	4	3	E

NEW



EN 407:2020

X3XXXX

EN 388: 2016

X5XXX

Ref. HS 403 (Kevlar Liner)

IDEAL FOR USE

In steel foundries, oven and bakeries, welding, plastic industries and glass handling.

DESCRIPTION

- Heavy-weight, Kevlar® outer/cotton inner, double-layered shell for thermal and cut protection.
- The best combination of cut protection and contact heat protection.
- Made of unique yellow color for better aesthetics.
- Ambidextrous, can be worn on either right or left hand.
- Provides protection against thermal risks (heat and/or fire) as the glove passes contact heat test of EN 407:2020 clause no. 4.5.3

CONFORMS TO

EN 388:2016, EN 407:2020

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
X	5	X	X	X

Technical Snapshot							
Ref.	Composition				Cuff Style	Thickness	Size
	Coating Material	Coating Color	Liner Material	Grip			
HS 401	NA	NA	Kevlar	NA	Knit Wrist	10 GG	XS, S, M and L
HS 402			Para-Aramid			10 GG	L
HS 403			Kevlar			7 GG	XL

CUT AND IMPACT PROTECTION

KARAM cut and impact protection gloves safeguard hands from sharp objects and heavy impacts. Made from advanced materials, they provide cut resistance and impact absorption, making them essential in high-risk industries like construction and manufacturing, etc.

NEW



EN 388: 2016

4X42DP

Ref. HS 361(LP) (HPPE/Glass Liner with Nitrile Sandy Coating)

IDEAL FOR USE

In demolition, drilling / rigging, heavy maintenance, cargo handling, extraction and refining.

DESCRIPTION

- Dense molded TPR protection zones on knuckles, fingers, thumb and back of hand with superior cut resistance.
- Made of unique orange, grey and black combination for better aesthetics.
- Nitrile sandy coating on the palm for superior grip.

CERTIFIED TO

EN 388:2016

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance	Impact Resistance
4	X	4	2	D	P

CE

EN 388:2016

DISPOSABLE GLOVES

Disposable gloves are single-use gloves designed to provide protection and hygiene for various tasks. They are commonly used in healthcare, food handling, cleaning, and laboratory settings. Made from Nitrile, these gloves act as a barrier against contaminants, chemicals, and pathogens. These gloves offer flexibility, sensitivity, and comfort but should be discarded after each use to prevent cross-contamination.

NEW



EN ISO 374-5: 2016

VIRUS

EN ISO 374-1: 2016/Type B

KPT

Ref. HS 501 (Nitrile Coating)

IDEAL FOR USE

In chemical handling, pharmaceutical processing, laboratory analysis, light assembly, maintenance and spray painting.

DESCRIPTION

- **3.2 mil nitrile disposable industrial glove designed to provide reliable protection and tactility.**
- Made of blue color for better aesthetics.
- Ambidextrous, can be worn on either right or left hand.
- Textured finish on fingers to enhance grip.
- Comes with a beaded cuff for reinforcing the edge to prevent tearing, providing durability and ease of donning.

CERTIFIED TO

EN ISO 374-1:2016/TYPE B (KPT) and EN 374-5:2016

Code Letter	Chemical
K	Sodium Hydroxide 40%
P	Hydrogen Peroxide 30%
T	Formaldehyde 37%

CE

EN ISO 374-1:2016
EN 374-5:2016

NEW



EN ISO 374-5: 2016
VIRUS
EN ISO 374-1: 2016/Type B
KPT

Ref. HS 502 (Nitrile Coating)

IDEAL FOR USE

In chemical handling, pharmaceutical processing, laboratory analysis, light assembly, maintenance and spray painting.

DESCRIPTION

- **4 mil nitrile disposable industrial glove deigned to provide reliable protection and tactility.**
- Made of blue color for better aesthetics.
- Ambidextrous, can be worn on either right or left hand.
- Textured finish on fingers to enhance grip.
- Comes with a beaded cuff for reinforcing the edge to prevent tearing, providing durability and ease of donning.

CERTIFIED TO

EN ISO 374-1:2016/TYPE B (KPT) and EN 374-5:2016

CE

EN ISO 374-1:2016
EN 374-5:2016

Code Letter	Chemical
K	Sodium Hydroxide 40%
P	Hydrogen Peroxide 30%
T	Formaldehyde 37%

NEW



EN ISO 374-5: 2016
VIRUS
EN ISO 374-1:2016 +A1:2018/Type B
KPT

Ref. HS 503 (Nitrile Coating)

IDEAL FOR USE

In chemical handling, handling oily components, laboratory analysis, light assembly and paint spraying.

DESCRIPTION

- **Long-cuffed 6 mil disposable gloves, unparalleled combination of chemical splash protection, comfort and durability.**
- Extremely strong and high resistance to chemicals.
- Made of blue color for better aesthetics.
- Extended cuff (12” long) to protect the forearm.
- Comes with a beaded cuff for reinforcing the edge to prevent tearing, providing durability and ease of donning.

CERTIFIED TO

EN ISO 374-1:2016+A1:2018/TYPE B (KPT) and EN 374-5:2016

CE

EN ISO 374-1:2016
EN 374-5:2016

Code Letter	Chemical
K	Sodium Hydroxide 40%
P	Hydrogen Peroxide 30%
T	Formaldehyde 37%

NEW



EN ISO 374-5: 2016
VIRUS
EN ISO 374-1:2016 +A1:2018/Type B
JKOPT

Code Letter	Chemical
J	n-Heptane
K	Sodium Hydroxide 40%
O	Ammonia 25%
P	Hydrogen Peroxide 30%
T	Formaldehyde 37%

Ref. HS 504 (Nitrile Coating)

IDEAL FOR USE

In Chemical handling, Handling oily components, Laboratory analysis, Light assembly, Light assembly and Paint spraying.

DESCRIPTION

- **Long-cuffed Nitrile disposable gloves with enhanced chemical resistance without compromising, comfort and tactility.**
- Extremely strong and high resistance to chemicals.
- Made of blue color for better aesthetics.
- Chlorinated inside to offer increased comfort and reduce friction when donning.
- Comes with a beaded cuff for reinforcing the edge to prevent tearing, providing durability and ease of donning.

CERTIFIED TO

EN ISO 374-1:2016+A1:2018/TYPE B (JKOPT) and EN 374-5:2016

CE
EN ISO 374-1:2016
EN 374-5:2016

Technical Snapshot

Ref.	Composition				Cuff Style	Thickness	Size
	Coating Material	Coating Color	Liner Material	Grip			
HS 501	Nitrile	Blue	NA	Textured Finish	Beaded	Tip 0.10 (± 0.03 mm) @middle finger Palm: 0.08 (± 0.02 mm) Cuff: 0.06 (± 0.02 mm)	S,M,L and XL
HS 502						Tip 0.16 (± 0.03 mm)@ middle finger Palm: 0.12 (± 0.02 mm) Cuff: 0.10 (± 0.02 mm)	S,M,L and XL
HS 503						Tip 0.17 (± 0.03 mm) @ middle finger Palm: 0.14 (± 0.02 mm) Cuff: 0.10 (± 0.02 mm)	S,M,L and XL
HS 504						Tip0.23(± 0.03 mm)@ middle finger Palm: 0.20(± 0.02 mm) Cuff: 0.14(± 0.02 mm)	S,M,L and XL

CHEMICAL RESISTANT GLOVES

Chemical-resistant gloves ensure reliable protection against numerous chemicals in hazardous environments. They are designed for durability and comfort, offering strong resistance to abrasions, punctures and chemical exposure, making them suitable for laboratories, chemical handling and industrial use.

EN ISO 374-5: 2016

EN ISO 374-1: 2016 /Type A

AJKLPT

EN 388: 2016

4101X



Ref. HS 151 (Nitrile Coating)

IDEAL FOR USE

In oil and hydrocarbon-based solutions, refining-oil and petrol, chemical processing and preparation, handling acids, alkalis and solvents, sub-assembly handling, dairy farming and cleaning and laboratory analysis.

DESCRIPTION

- Superior comfortable gloves with good chemical protection and strong mechanical performance.
- Has a oustanding abrasion resistance, provides heavy duty mechanical and chemical protection.
- Made of unique green color for better aesthetics.
- The nitrile coating offers superior dexterity and excellent grip in both wet and dry conditions.

CERTIFIED TO

EN 388:2016, EN ISO 374-1:2016/TYPE A (AJKLPT) and EN 374-5:2016.

CE

EN 388:2016
EN ISO 374-1:2016
EN 374-5:2016

Code Letter	Chemical
A	Methanol
J	n-Heptane
K	Sodium Hydroxide 40%
L	Sulphuric Acid 96%
P	Hydrogen Peroxide 30%
T	Formaldehyde 37%

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	1	0	1	X

EN ISO 374-5: 2016

VIRUS

EN ISO 374-1: 2016 /Type A

AJKLMNOP

EN 388: 2016

2121X



Ref. HS 161 (Flocked Liner with Neoprene Latex Blended Coating)

IDEAL FOR USE

In laboratory maintenance and clean up, chemical processing, pest control, degreasing, leather tanning, janitorial use, plant maintenance and heavy equipment.

DESCRIPTION

- Neoprene blended unsupported gloves provides excellent chemical protection.
- Thick shell provided for longer chemical and abrasion resistance.
- Made of black color for better aesthetics.
- Neoprene latex blended coating protects against a wide range of acids, alkalis, alcohols and many solvents.

CERTIFIED TO

EN 388:2016, EN ISO 374-1:2016/TYPE A(JKLNPT) and EN ISO 374-5:2016(VIRUS)

CE

EN 388:2016
EN ISO 374-1:2016
EN 374-5:2016

Code Letter	Chemical
J	n-Heptane
K	Sodium Hydroxide 40%
L	Sulphuric acid 96%
N	Acetic acid 99%
P	Hydrogen Peroxide 30%
T	Formaldehyde 37%

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
2	1	2	1	X

NEW



EN ISO 374-4: 2016

EN ISO 374-1: 2016 /Type A

AJKLMNO

EN 388: 2016

2120X

Ref. HS 171 (Flocked Liner with Neoprene over Latex Coating)

IDEAL FOR USE

In laboratory maintenance and clean up, chemical processing, pestcontrol, degreasing, leather tanning, janitorial use, plant maintenance and heavy equipment.

DESCRIPTION

- Bi-color double dipped neoprene coated over natural rubber for long lasting and protection against a broad range of chemicals.
- Provides advanced grip on wet or dry surfaces and absorbs perspiration and increses worker comfort.
- Made of unique blue and yellow color combination for better aesthetics.
- Neoprene over natural rubber latex for advanced protection against abroad range of chemicals.

CERTIFIED TO

EN 388:2016, EN ISO 374-1:2016/TYPE A(AKLMNO) and EN ISO 374-4:2016

CE

EN 388:2016
EN ISO 374-1:2016
EN ISO 374-4:2016

Code Letter	Chemical
A	Methanol
K	Sodium Hydroxide 40%
L	Sulphuric Acid 96%
M	Nitric Acid 65%
N	Acetic Acid 99%
O	Ammonia 25%

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
2	1	2	0	X

NEW



EN ISO 374-5: 2016

VIRUS

EN ISO 374-1: 2016+A1:2018 / Type A

AJKLMPST

EN 388: 2016

4121X

Ref. HS 202(16) (Cotton Interlock Liner with PVC Coating)

IDEAL FOR USE

In laboratory maintenance and clean up, chemical processing, pestcontrol, degreasing, leather tanning, janitorial use, plant maintenance and heavy equipment.

DESCRIPTION

- Top-of-the-range PVC coated gauntlet gloves provide wide-ranging chemical protection and great mechanical protection.
- Protects against abrasions while offering excellent grip, even in wet and oily conditions.
- Made of unique brown color for better aesthetics.
- Multi -layer PVC coating ensures EN 374 Type -A chemical resistance and protection from acids and hydrocarbons.

CERTIFIED TO

EN 388:2016+A1:2018, EN ISO 374-1:2016+A1:2018/TYPE A (AKLMPST) and EN ISO 374-5:2016

CE

EN 388:2016+A1:2018
EN ISO 374-1:2016+A1:2018
EN ISO 374-5:2016

Code Letter	Chemical
A	Methanol
K	Sodium Hydroxide 40%
L	Sulphuric Acid 96%
M	Nitric Acid 65%
P	Hydrogen Peroxide 30%
S	Hydrofluoric Acid 40%
T	Formaldehyde 37%

Abrasion Resistance	Blade Cut Resistance	Tear Resistance	Puncture Resistance	TDM Resistance
4	1	2	1	X

Technical Snapshot							
Ref.	**Composition**				**Cuff Style**	**Thickness**	**Size**
	Coating Material	**Coating Color**	**Liner Material**	**Grip**			
HS151	Nitrile	Green	NA	Diamond		15 Mil	M, L, XL and 3XL
HS 161	Neoprene Latex Blended	Black	Flocked	Raised Diamond	Straight Cuff	26 Mil	L and XL
HS171	Neoprene over Latex	Blue/ Yellow	Flocked	NA		22 Mil	L and XL
HS 202(16)	PVC	Brown	Cotton Interlock		Gauntlet	NA	L

NEW

FRONTIER™

Hand Protection

GRIP AND GENERAL PURPOSE

Grip and General Purpose Gloves provide reliable protection and enhanced grip for various tasks. Designed for durability and comfort, they're perfect for industrial, construction, agriculture and everyday use, ensuring safety and efficiency in the work-place.



Performance Level Ratings	
Abrasion Resistance	2
Blade Cut Resistance	1
Tear Resistance	2
Puncture Resistance	1
TDM Resistance	X

EN 388:2016

2121X

CE

Ref. FT401

FEATURES

- 10 GG cotton composite shell with latex crinkle palm coated gloves
- Cotton composite liner delivers flexibility and comfort
- Excellent in grip in dry and wet environments
- Open back to reduce perspiration build-up
- Elasticated wrist for a secure fit

IDEAL FOR USE IN

- Handling of bricks and tiles
- General material handling
- Plumbing works
- Public utilities
- Waste collection
- Construction
- Recycle operations
- Logistics & warehousing

CERTIFIED TO

EN 388:2016



Performance Level Ratings	
Abrasion Resistance	3
Blade Cut Resistance	1
Tear Resistance	2
Puncture Resistance	1
TDM Resistance	X

EN 388:2016

3121X

CE

Ref. FT404

FEATURES

- 13 GG polyester shell with polyurethane palm coated gloves
- Offers excellent abrasion resistance
- Comfortable seamless liner
- Breathable back for comfort
- Elasticated wrist for a secure fit
- **Comes with White color coating**

IDEAL FOR USE IN

- General handling
- Small component assembly
- General industry applications
- Packaging
- Product inspection

CERTIFIED TO

EN 388:2016



Ref. FT405

FEATURES

- 13 GG polyester shell with polyurethane palm coated gloves
- Offers excellent abrasion resistance
- Comfortable seamless liner
- Breathable back for comfort
- Elasticated wrist for a secure fit
- **Comes with black color coating**

IDEAL FOR USE IN

- General handling
- Small component assembly
- General industry applications
- Logistics and warehousing
- Packaging
- Product inspection
- Agriculture

CERTIFIED TO

EN 388:2016

Performance Level Ratings	
Abrasion Resistance	3
Blade Cut Resistance	1
Tear Resistance	2
Puncture Resistance	1
TDM Resistance	X

EN 388:2016

3121X

CE



Ref. FT406

FEATURES

- 13 GG polyester shell with polyurethane palm coated gloves
- Offers excellent abrasion resistance
- Comfortable seamless liner
- Breathable back for comfort
- Elasticated wrist for a secure fit
- **Comes with Grey color coating**

IDEAL FOR USE IN

- General handling
- Small component assembly
- General industry applications
- Logistics and warehousing
- Packaging
- Product inspection
- Agriculture

CERTIFIED TO

EN 388:2016

Performance Level Ratings	
Abrasion Resistance	3
Blade Cut Resistance	1
Tear Resistance	2
Puncture Resistance	1
TDM Resistance	X

EN 388:2016

3121X

CE



Ref. FT408

FEATURES

- 13 GG polyester shell with nitrile palm coated glove
- Durable & light weight
- Great comfort and dexterity
- Good resistant to abrasion
- Elasticated wrist for a secure fit
- Excellent grip in dry and slightly oily environments

IDEAL FOR USE IN

- General handling
- Warehouse work
- Product assembly
- Packaging
- Landscaping and gardening

CERTIFIED TO

EN 388:2016

Performance Level Ratings	
Abrasion Resistance	3
Blade Cut Resistance	1
Tear Resistance	2
Puncture Resistance	1
TDM Resistance	X

EN 388:2016

3121X

CE



Ref. FT409

FEATURES

- 13 GG polyester shell with nitrile palm coated glove
- Durable & light weight
- Great comfort and dexterity
- Good resistant to abrasion
- Elasticated wrist for a secure fit
- Excellent grip in dry and slightly oily environments

IDEAL FOR USE IN

- General handling
- Warehouse work
- Product assembly
- Packaging
- Transport
- Landscaping and gardening

CERTIFIED TO

EN 388:2016

Performance Level Ratings	
Abrasion Resistance	3
Blade Cut Resistance	1
Tear Resistance	2
Puncture Resistance	1
TDM Resistance	X

EN 388:2016

3121X

CE

TECHNICAL DETAILS								
GENERAL AND GRIP PURPOSE								
Ref.	**Coating**	**Coating Variants**	**Coating Colour**	**Liner Gauge**	**Liner Material**	**Liner Color**	**Cuff Style**	**Size**
FT401	Crinkle Latex	Palm Coated	Green	10GG	Cotton Composite	Grey Melange	Knit Wrist	M&L
FT404	Polyurethane	Palm Coated	White	13GG	Polyester	White	Knit Wrist	M&L
FT405	Polyurethane	Palm Coated	Black	13GG	Polyester	Black	Knit Wrist	M&L
FT406	Polyurethane	Palm Coated	Grey	13GG	Polyester	Grey	Knit Wrist	M&L
FT408	Nitrile	Palm Coated	Grey	13GG	Polyester	White	Knit Wrist	M&L
FT409	Nitrile	Palm Coated	Black	13GG	Polyester	Black	Knit Wrist	M&L

MULTI PURPOSE HEAVY DUTY GLOVES

Our Heavy Duty Gloves are designed for tough applications, offering superior protection, durability, and grip. Ideal for handling rough and abrasive materials, these gloves provide protection in handling heavy duty cables, rough casting, oil and gas, metal fabrication, etc. Built for comfort and long-lasting use, they ensure optimal safety in demanding environments.



Performance Level Ratings	
Abrasion Resistance	3
Blade Cut Resistance	1
Tear Resistance	1
Puncture Resistance	1
TDM Resistance	X

EN 388:2016



3111X

CE

Ref. FT451

FEATURES

- Nitrile fully coated glove with cotton jersey cut & sewn liner and safety cuff
- Ideal for heavy duty applications
- Good abrasion resistance
- Acts as a good barrier to prevent grease and oil
- Cotton jersey liner reduces hand fatigue
- Excellent grip in dry and oily environments

IDEAL FOR USE IN

- Cold plastic moldings
- Handling metal products
- Raw wood handling
- Rough casting and cores
- Heavy duty cables
- Refuse collection

CERTIFIED TO

EN 388:2016



Ref. FT452

FEATURES

- Double dipped PVC coated gloves with cotton interlock liner
- Double dipped PVC coating provides defensive protection from abrasion resistance mild acid & alkalis
- Rough finish grip offers high-performance precision in greasy or oily environments
- Ergonomic form fitting shape reduces hand fatigue over long periods of wear
- Soft cotton interlock liner and flexible fabric ensures optimum comfort
- Available in 12”, 14”, 16” and 18” length variants

IDEAL FOR USE IN

- Cold plastic moldings
- Handling metal products
- Raw wood handling
- Rough casting and cores
- Logistics & warehousing
- Heavy duty cables
- Refuse collection
- Oil and gas

CERTIFIED TO

EN 388:2016

Performance Level Ratings	
Abrasion Resistance	4
Blade Cut Resistance	1
Tear Resistance	1
Puncture Resistance	1
TDM Resistance	X

EN 388:2016

4111X

CE

TECHNICAL DETAILS

MULTI PURPOSE HEAVY DUTY GLOVES

Ref.	Coating	Coating Variants	Coating Colour	Liner Gauge	Liner Material	Liner Color	Cuff Style	Size
FT451	Nitrile	Fully Coated	Blue	NA	Cotton Jersey	Natural white	Safety cuff	L
FT452	PVC	Fully Dipped	Green	NA	Cotton Interlock	Natural white	Gauntlet	L

CHEMICAL RESISTANT GLOVES

Chemical Resistant Gloves provide reliable protection against a wide range of chemicals, ensuring safety in hazardous environments. Designed for durability and comfort, they offer excellent resistance to abrasions, punctures, and chemical exposure, making them ideal for laboratories, chemical handling and industrial use.



Performance Level Ratings	
Abrasion Resistance	4
Blade Cut Resistance	1
Tear Resistance	1
Puncture Resistance	1
TDM Resistance	X

EN 388:2016

4111X

CE

Ref. FT453

FEATURES

- Single dipped PVC coated gloves with cotton interlock liner
- The highly cost-effective, PVC gloves offering good protection against abrasion, mild acids & alkalis
- Cotton interlock lining offers easy movement and continuous wear
- Extended protection till the forearm
- Available in 12” and 14” lengths

IDEAL FOR USE IN

- Chemical spray and treatment
- Handling light chemicals in agriculture
- Horticulture
- Laboratory analysis
- Painting & spray workshops
- General maintenance

CERTIFIED TO

EN 388:2016



Performance Level Ratings	
Abrasion Resistance	3
Blade Cut Resistance	0
Tear Resistance	0
Puncture Resistance	1
TDM Resistance	X

EN 388:2016

3001X

EN ISO 374-1:2016/TYPE A

AJKLMN

EN ISO 374-5:2016

VIRUS

CE

Ref. FT551

FEATURES

- Light, reusable nitrile gloves for handling oil-based chemicals & solvents
- Overlapped diamond-pattern on the surface for unmatched grip in wet/oily conditions
- Optimal flexibility and dexterity for comfortable working
- Good abrasion resistance for protection when handling coarse objects
- Cotton flock lined improves comfort of the gloves

IDEAL FOR USE IN

- Chemical processing and preparation
- Degreasing
- Light-assembly applications
- Food processing and handling
- Meat and poultry processing

CERTIFIED TO

EN 388:2016

EN ISO 374-1:2016/Type A

EN ISO 374-5:2016-Virus



Ref. FT552

FEATURES

- 22 mil Natural latex flock lined household gloves
- Fish scale pattern for an enhanced grip in wet and dry conditions
- Pure cotton flock lining provides easy on and off, plus moisture absorption
- Chlorinated for best chemical resistance and least latex allergy to the wearer
- Rolled cuff provides additional strength to cuff edge for long lasting life and prevents liquid run-off
- Sanitized with bacteriostatic and fungistatic additives for advanced protection

IDEAL FOR USE IN

- Degreasing
- Detergents & cleaning liquids
- Food handling
- Meat & poultry processing
- Janitorial use

TECHNICAL DETAILS

CHEMICAL RESISTANT GLOVES

Ref.	Coating	Coating Variants	Coating Colour	Liner Gauge	Liner Material	Liner Color	Cuff Style	Size
FT453	PVC	Fully Dipped	Yellow	NA	Cotton Interlock	Natural white	Gauntlet	L
FT551	Nitrile	NA	Green	NA	NA	NA	Straight cuff	L&XL
FT552	Natural Latex	NA	Orange	NA	NA	NA	Beaded	L&XL

MECHNICAL AND CUT RESISTANT GLOVES

Frontier Mechanical and cut resistant gloves provide ergonomic protection, offering excellent grip, dexterity, and comfort for a wide range of general work applications. Suitable for handling tasks in both dry and wet conditions, they come with different coatings to match various work environments. Tested to EN 388:2016 standards, they ensure superior resistance to abrasion, cuts, tears, and punctures, delivering top-quality performance and finish.



Ref. FT501

FEATURES

- 13 GG high strength nylon/glass/spandex TDM-level C shell with polyurethane palm coated gloves
- Flexible and comfortable while offering great dexterity
- Providing moderate level of cut resistance, level C (ISO 13997)
- PU coating gives good abrasion resistance
- 13GG HSN liner provides a 'second skin' fit for good handling small parts
- Designed for easy movement and prolonged wear
- Good grip in wet and dry conditions

IDEAL FOR USE IN

- Assembling
- Machining
- Handling sharp and greasy parts
- Precision mechanics
- Metal stamping

CERTIFIED TO

EN 388:2016

Performance Level Ratings	
Abrasion Resistance	4
Blade Cut Resistance	X
Tear Resistance	4
Puncture Resistance	2
TDM Resistance	C

EN 388:2016

4X42C

CE

TECHNICAL DETAILS

MECHNICAL AND CUT RESISTANT GLOVES

Ref.	Coating	Coating Variants	Coating Colour	Liner Gauge	Liner Material	Liner Color	Cuff Style	Size
FT501	Polyurethane	Palm Coated	Grey	13GG	HS Nylon/Glass/ Spandex	White Melange	Knit wrist	M&L

COTTON AND SYNTHETIC GLOVES

Cotton gloves offer exceptional comfort and flexibility, making them ideal for general handling tasks, including warehouse work, general handling, product assembly, packaging, gardening and landscaping, light assembly etc. They provide a secure fit for efficient performance in various applications.



COTTON KNITTED GLOVES
Ref. FT601, FT602, FT603, FT611, FT613, FT615

FEATURES

- Cotton natural fibers offers great comfort
- Seamless liner prevents irritation
- Knit wrist with hem
- Ambidextrous, can be worn on either right or left hand
- Available in different weight, thickness and colors
- Available in natural white, navi blue and grey melange shell
- Available in 7 gauge (40, 50, 60, 70, 80 & 90 grams)
- Available in 10 gauge (40, 50, 60, 70, 80 & 90 grams)

IDEAL FOR USE IN

- General handling
- Warehouse work
- Packaging
- Product assembly
- Landscaping and gardening

Product Codes		Shell Weight / Dozen Pair					
		480	600	720	840	960	1080
7 Gauge	Natural White	FT601(40)	FT601(50)	FT601(60)	FT601(70)	FT601(80)	FT601(90)
	Navy Blue	FT602(40)	FT602(50)	FT602(60)	FT602(70)	FT602(80)	FT602(90)
	Grey Melange	FT603(40)	FT603(50)	FT603(60)	FT603(70)	FT603(80)	FT603(90)
10 Gauge	Natural White	FT613(40)	FT613(50)	FT613(60)	FT613(70)	FT613(80)	FT613(90)
	Navy Blue	FT615(40)	FT615(50)	FT615(60)	FT615(70)	FT615(80)	FT615(90)
	Grey Melange	FT611(40)	FT611(50)	FT611(60)	FT611(70)	FT611(80)	FT611(90)



COTTON KNITTED DOUBLE DOTTED GLOVES

Ref. FT604(DD), FT605(DD), FT606(DD), FT612(DD), FT614(DD) & FT616(DD)

FEATURES

- Cotton natural fibers offers great comfort
- Blue PVC dots on both side for advanced grip
- Seamless liner prevents irritation
- Knit wrist with hem
- Use of both sides/extended glove usage
- Available in natural white, navy blue and grey melange shell
- Available in 7 gauge (40, 50, 60, 70, 80 & 90 grams)
- Available in 10 gauge (40, 50, 60, 70, 80 & 90 grams)

IDEAL FOR USE IN

- General handling
- Light assembly
- Loading & unloading
- General maintenance
- Components handling
- Landscaping and gardening

Product Codes		Shell Weight / Dozen Pair					
		480	600	720	840	960	1080
7 Gauge	Natural White	FT604(DD)(40)	FT604(DD)(50)	FT604(DD)(60)	FT604(DD)(70)	FT604(DD)(80)	FT604(DD)(90)
	Navy Blue	FT605(DD)(40)	FT605(DD)(50)	FT605(DD)(60)	FT605(DD)(70)	FT605(DD)(80)	FT605(DD)(90)
	Grey Melange	FT606(DD)(40)	FT606(DD)(50)	FT606(DD)(60)	FT606(DD)(70)	FT606(DD)(80)	FT606(DD)(90)
10 Gauge	Natural White	FT614(DD)(40)	FT614(DD)(50)	FT614(DD)(60)	FT614(DD)(70)	FT614(DD)(80)	FT614(DD)(90)
	Navy Blue	FT616(DD)(40)	FT616(DD)(50)	FT616(DD)(60)	FT616(DD)(70)	FT616(DD)(80)	FT616(DD)(90)
	Grey Melange	FT612(DD)(40)	FT612(DD)(50)	FT612(DD)(60)	FT612(DD)(70)	FT612(DD)(80)	FT612(DD)(90)



COTTON KNITTED SINGLE DOTTED GLOVES
Ref. FT604(SD), FT605(SD), FT606(SD), FT612(SD), FT614(SD) & FT616(SD)

FEATURES

- Cotton natural fibers offers great comfort
- Blue PVC dots on both side for advanced grip
- Seamless liner prevents irritation
- Knit wrist with hem
- Use of both sides/extended glove usage
- Available in natural white, navy blue and grey melange shell
- Available in 7 gauge (40, 50, 60, 70, 80 & 90 grams)
- Available in 7 gauge (40, 50, 60, 70, 80 & 90 grams)

IDEAL FOR USE IN

- General handling
- Light assembly
- Components handling
- General maintenance
- Loading & unloading
- Gardening and landscaping

Product Codes		Shell Weight / Dozen Pair					
		480	600	720	840	960	1080
7 Gauge	Natural White	FT604(SD)(40)	FT604(SD)(50)	FT604(SD)(60)	FT604(SD)(70)	FT604(SD)(80)	FT604(SD)(90)
	Navy Blue	FT605(SD)(40)	FT605(SD)(50)	FT605(SD)(60)	FT605(SD)(70)	FT605(SD)(80)	FT605(SD)(90)
	Grey Melange	FT606(SD)(40)	FT606(SD)(50)	FT606(SD)(60)	FT606(SD)(70)	FT606(SD)(80)	FT606(SD)(90)
10 Gauge	Natural White	FT614(SD)(40)	FT614(SD)(50)	FT614(SD)(60)	FT614(SD)(70)	FT614(SD)(80)	FT614(SD)(90)
	Navy Blue	FT616(SD)(40)	FT616(SD)(50)	FT616(SD)(60)	FT616(SD)(70)	FT616(SD)(80)	FT616(SD)(90)
	Grey Melange	FT612(SD)(40)	FT612(SD)(50)	FT612(SD)(60)	FT612(SD)(70)	FT612(SD)(80)	FT612(SD)(90)

TECHNICAL DETAILS								
COTTON AND SYNTHETIC GLOVES								
Ref.	**Design**	**Shell Material**	**Shell Thickness**	**Shell Colour**	**Coating**	**Coating Colour**	**Cuff Style**	**Size**
FT601	Knitted	100% Cotton	7 Gauge	Natural White Navy Blue Grey Melange	NA	NA	Continuous Knit	Universal
FT602	Knitted	100% Cotton	7 Gauge	Natural White Navy Blue Grey Melange	NA	NA	Continuous Knit	Universal
FT603	Knitted	100% Cotton	7 Gauge	Natural White Navy Blue Grey Melange	NA	NA	Continuous Knit	Universal
FT611	Knitted	100% Cotton	10 Gauge	Natural White Navy Blue Grey Melange	NA	NA	Continuous Knit	Universal
FT613	Knitted	100% Cotton	10 Gauge	Natural White Navy Blue Grey Melange	NA	NA	Continuous Knit	Universal
FT615	Knitted	100% Cotton	10 Gauge	Natural White Navy Blue Grey Melange	NA	NA	Continuous Knit	Universal
FT604(SD)	Knitted & Dotted	100% Cotton - PVC	7 Gauge	Natural White Navy Blue Grey Melange	PVC Dots (Palm Side only)	Blue	Continuous Knit	Universal
FT605(SD)	Knitted & Dotted	100% Cotton - PVC	7 Gauge	Natural White Navy Blue Grey Melange	PVC Dots (Palm Side only)	Blue	Continuous Knit	Universal
FT606(SD)	Knitted & Dotted	100% Cotton - PVC	7 Gauge	Natural White Navy Blue Grey Melange	PVC Dots (Palm Side only)	Blue	Continuous Knit	Universal
FT612(SD)	Knitted & Dotted	100% Cotton - PVC	10 Gauge	Natural White Navy Blue Grey Melange	PVC Dots (Palm Side only)	Blue	Continuous Knit	Universal
FT614(SD)	Knitted & Dotted	100% Cotton - PVC	10 Gauge	Natural White Navy Blue Grey Melange	PVC Dots (Palm Side only)	Blue	Continuous Knit	Universal
FT616(SD)	Knitted & Dotted	100% Cotton - PVC	10 Gauge	Natural White Navy Blue Grey Melange	PVC Dots (Palm Side only)	Blue	Continuous Knit	Universal
FT604(DD)	Knitted & Dotted	100% Cotton	7 Gauge	Natural White Navy Blue Grey Melange	PVC Dots (Both sides)	Blue	Continuous Knit	Universal
FT605(DD)	Knitted & Dotted	100% Cotton	7 Gauge	Natural White Navy Blue Grey Melange	PVC Dots (Both sides)	Blue	Continuous Knit	Universal
FT606(DD)	Knitted & Dotted	100% Cotton	7 Gauge	Natural White Navy Blue Grey Melange	PVC Dots (Both sides)	Blue	Continuous Knit	Universal
FT612(DD)	Knitted & Dotted	100% Cotton	10 Gauge	Natural White Navy Blue Grey Melange	PVC Dots (Both sides)	Blue	Continuous Knit	Universal
FT614(DD)	Knitted & Dotted	100% Cotton	10 Gauge	Natural White Navy Blue Grey Melange	PVC Dots (Both sides)	Blue	Continuous Knit	Universal
FT616(DD)	Knitted & Dotted	100% Cotton	10 Gauge	Natural White Navy Blue Grey Melange	PVC Dots (Both sides)	Blue	Continuous Knit	Universal

FRONTIER™ Arm Protection

ARM SLEEVES

Made from natural cotton, these sleeves offer a cool, comfortable fit with a double-ply seamless knit for added comfort. They provide basic arm protection against minor scrapes and abrasions and are launderable for extended use.



Ref. FT701

FEATURES

- Made from natural cotton, for a cool and comfortable fit
- Double ply seamless knit construction for comfort
- Offers mediocre arm protection from minor scrapes & abrasion
- Launderable far extended life and to reduce replacement costs
- Available in 14” length

IDEAL FOR USE IN

- Automotive
- Manufacturing
- Sheet metal fabrication
- Recycling industry



Ref. FT703

FEATURES

- Made from natural cotton, for a cool and comfortable fit
- Double ply seamless knit construction for comfort
- Offers mediocre arm protection from minor scrapes & abrasion
- Launderable far extended life and to reduce replacement costs
- Available in 14” length

IDEAL FOR USE IN

- Automotive
- Manufacturing
- Sheet metal fabrication
- Construction & recycling industry

TECHNICAL DETAILS

ARM PROTECTION

Ref.	Liner Material	Liner Colour	Length	Size
FT701	Cotton	Natural White	14”(± 5mm)	Universal Size
FT703	Cotton	Grey Melange	14”(± 5mm)	Universal Size

LEATHER SAFETY GLOVES

Leather safety gloves provide protection, durability, and flexibility for various industrial applications. They offer excellent resistance to abrasion, heat, and punctures, making them suitable for tasks like construction, welding, material handling, etc These gloves also ensure a secure grip while maintaining a level of comfort and dexterity for the user.



LEATHER ARM SLEEVE
Ref. FT851(UL)(GY)(24) & (22)

FEATURES

- Long full sleeve for arm protection
- Good quality split leather
- Length is available at 22" & 24" inches
- Heat resistance upto 100°C for 15 seconds
- Provides protection from sparks/ metal splatters

IDEAL FOR USE IN

- Welding
- Furnace
- Iron and steel
- Mining
- Material handling
- Manufacturing
- Metal

COMPLIES WITH

EN 388:2016, EN 407:2020



Ref. FT821(P)(BE/YW)(16)

FEATURES

- Double palm for thermal protection & durability
- Heat resistance upto 350°C for 15 seconds
- Para aramid thread stitching for maximum seam strength
- Good quality split leather ensures better abrasion resistance
- Dexterity, tear resistance & durability in use
- Inside cotton lining provides thermal insulation and extended comfort
- Gunn cut, gauntlet cuff, single piece back
- Wing thumb allows more flexibility
- Welted seams & self-hemmed long cuff for extended life and safety

IDEAL FOR USE IN

- Heavy duty welding
- Hot material handling
- Metal fabrication
- Molten metal
- Construction

COMPLIES WITH

EN 388:2016, EN 407:2020



Ref. FT811(RD)(14)

FEATURES

- Meant for arc welding
- Good quality split leather
- Inside full lining cuff lining 100% cotton
- Wing thumb, gunn cut, gauntlet cuff
- Length available 35 cm/14”
- Heat resistance upto 100°C for 15 seconds

IDEAL FOR USE IN

- Welding
- Material handling
- Metal fabrication
- Construction

COMPLIES WITH

EN 388:2016, EN 407:2020



Ref. FT842(UL) (GY)(10)

FEATURES

- Soft and comfortable driving gloves
- Soft grain leather
- Good dexterity and tear strength
- Good flexibility and abrasion resistance
- The wing thumb allows more flexibility
- Shirred elastic wrist back
- Comes with velcro for securing the wrist closure, ensuring a tight fit and easy adjustability

IDEAL FOR USE IN

- Driving
- Gardening
- Warehousing
- Construction
- Material handling
- Iron and steel
- Manufacturing
- Logistics

COMPLIES WITH

EN 388:2016



Ref. FT841(UL)(GY)(10)

FEATURES

- Soft and comfortable driving gloves
- Soft grain leather
- Good dexterity and tear strength
- Good flexibility and abrasion resistance
- The wing thumb allows more flexibility
- Shirred elastic wrist back

IDEAL FOR USE IN

- Driving
- Gardening
- Warehousing
- Construction
- Material handling
- Iron and steel
- Manufacturing
- Logistics

COMPLIES WITH

EN 388:2016



Ref. FT821(P)(GN/YW)(16)

FEATURES

- Good quality split leather
- Inside full lining cuff lining 100% cotton
- Wing thumb, gunn cut, gauntlet cuff
- All-important joints are welted
- Length available 40cm / 16”
- Heat resistance upto 100°C for 15 seconds
- Polyester thread stitching
- Reinforcement on thumb

IDEAL FOR USE IN

- Welding
- Metal fabrication
- Molten metal
- Material handling

COMPLIES WITH

EN 388:2016, EN 407:2020



Ref. FT822(P)(MN)(14)

FEATURES

- Cut & heat resistant gloves
- Heat resistance upto 250˚C for 15 seconds
- Para aramid thread stitching for maximum seam strength
- Palm made of para aramid fabric
- Special quality split leather to ensure better heat and abrasions
- Tear, puncture resistance & durability in use
- Inside heat resistant, woolen lining provides thermal insulation
- Gunn cut, gauntlet cuff, wing thumb & double piece back
- Wing thumb allows more flexibility. Important joints are welted

IDEAL FOR USE IN

- Heavy duty welding
- Hot material handling
- Construction & glass cutting
- Foundry & furnaces
- Warehousing & transportation
- Metal fabrication
- Molten metal
- Steel & metal
- Mining
- Shipyard

COMPLIES WITH

EN 388:2016, EN 407:2020



Ref. FT801(UL)(GY)(14)

FEATURES

- Good quality split leather
- Wing thumb, gunn cut, gauntlet cuff
- Heat resistance upto 100°C for 15 seconds

IDEAL FOR USE IN

- Welding
- Material handling
- Construction etc.
- Metal fabrication
- Maintenance

COMPLIES WITH

EN 388:2016, EN 407:2020



Ref. FT811(P)(GY)(14)

FEATURES

- Good quality split leather
- Comes with a welted joint for added strength and durability, reducing tearing and enhancing protection
- Wing thumb, gunn cut, gauntlet cuff
- Heat resistance upto 100°C for 15 seconds
- Also, available in economy version i.e. without welted joint option; Ref: FT811(GY)(14)

IDEAL FOR USE IN

- Welding
- Material handling
- Construction
- Metal fabrication
- Maintenance
- Smelting etc.

COMPLIES WITH

EN 388:2016, EN 407:2020



Ref. FT831(UL)(GY)(10.5)

FEATURES

- Good quality split leather
- Single palm leather for enhanced protection
- Jersey lined for comfort
- Good flexibility and abrasion resistance
- Rubberized cuff for extra protection
- The wing thumb allows more flexibility

IDEAL FOR USE IN

- Construction
- Machinery & equipment
- Metal grinding sheet
- Metal operation
- Manufacturing

COMPLIES WITH

EN 388:2016



Ref. FT832(UL)(GY)(10.5)

FEATURES

- Good quality split leather
- Double palm for enhanced protection & durability
- Jersey lined for comfort
- Good flexibility and abrasion resistance
- Rubberized cuff for extra protection
- The wing thumb allows more flexibility

IDEAL FOR USE

- Construction
- Machinery & equipment
- Metal grinding sheet
- Carpentry work
- Metal operation
- Manufacturing
- Gardening

COMPLIES WITH

EN 388:2016

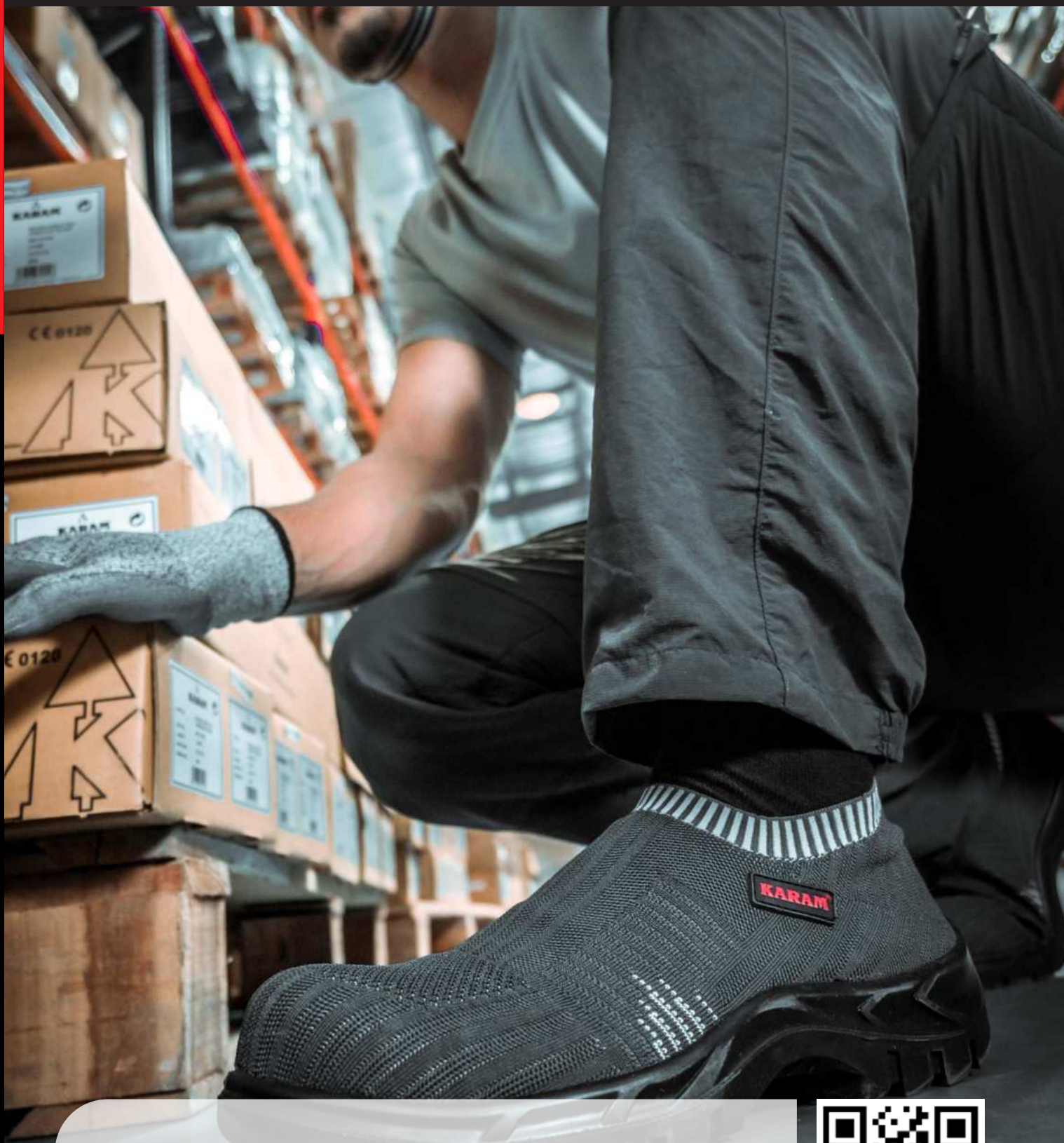
TECHNICAL DETAILS

LEATHER SAFETY GLOVES

Ref.	Construction	Upper Material	Upper Material-II	Liner Material	Thread	Color	Cuff Style	Length
FT851(UL)(GY)(24)&(22)	Cut & sewn	Split leather	NA	Unlined	Polyester	Grey	NA	22" & 24"
FT821(P)(BE/YW)(16)	Cut & sewn	Split leather	NA	Cotton	Para-Aramid	Blue & yellow	Gauntlet	16"
FT811(RD)(14)	Cut & sewn	Split leather	NA	Cotton	Polyester	Red	Gauntlet	14"
FT842(UL)(GY)(10)	Cut & sewn	Grain leather	NA	Unlined	Polyester	Natural white	Slip-on	10"
FT841(UL)(GY)(10)	Cut & sewn	Grain leather	NA	Unlined	Polyester	Natural white	Slip-on	10"
FT821(P)(GN/YW)(16)	Cut & sewn	Split leather	NA	Cotton	Polyester	Green & yellow	Gauntlet	16"
FT822(P)(MN)(14)	Cut & sewn	Split leather	Para-Aramid	Woolen felt	Para-Aramid	Maroon & yellow	Gauntlet	14"
FT801(UL)(GY)(14)	Cut & sewn	Split leather	NA	NA	Polyester	Grey	Gauntlet	14"
FT811(P)(GY)(14)	Cut & sewn	Split leather	NA	Cotton	Polyester	Grey	Gauntlet	14"
FT831(UL)(GY)(10.5)	Cut & sewn	Split leather	Cotton drill	Cotton & palm	Polyester	Grey	Safety	10.5"
FT832(UL)(GY)(10.5)	Cut & sewn	Split leather	Cotton drill	Cotton & palm	Polyester	Grey & green	Safety	10.5"

NOTE

FOOT PROTECTION



KARAM offers a wide range of Safety Footwear that is stylish, robust and provides the complete Foot Protection.The range is duly certified with the highest standards of EN and IS.

Scan here *for a virtual tour of the product*

Standards at a Glance

The Safety Footwear that is expected to comply with the norm is marked with the letter "S" (Safety) followed by the letter "B" (Basic) or numbers showing the category it belongs to.

EN ISO 20345:2022

IS 15298(Part-02)

Category SB(Basic Safety): Involves the following requirements:

Toe Cap withstands 200 Joules

SB- Basic Characteristics

S1- Has SB Characteristics supplemented with the following:

- Antistatic Footwear (A)
- Energy Absorption in the heel region (E)
- Closed heel area
- Resistance to fuel Oil (FO)

S2- Has S1 Characteristics supplemented with the following:

- Water Penetration and Water Absorption Resistant Upper(WPA)

S3- Has S2 Characteristics supplemented with the following:

- Anti penetration midsole (P)
- Cleated outsole

Additional Requirements of Safety Shoe as per IS and EN Standard

Additional Requirements and Safety Standards (EN 345)(IS 15298(Part-02))	SB	S1	S2	S3
Antistatic Footwear	-			
Energy Absorption in the heel region	-			
Resistance to Fuel Oil	-			
Water Penetration & Water Absorption Upper	-	-		
Penetration Resistance (Steel Midsole)	-	-	-	
Cold Insulation	-	-	-	-
Heat Insulation	-	-	-	-
Conductive Footwear	-	-	-	-

KARAM Safety Footwear: KARAM Safety Shoes conforms to ISI and CE standards and provide SB, S1, S1P, S2, S3 category of Foot Safety.



SHOE FLEXING RESISTANCE TEST



SOLE FLEXING RESISTANCE TEST

Testing

TESTED & CERTIFIED



SOLE ABRASION RESISTANCE TEST



ENERGY ABSORPTION OF SEAT REGION TEST

KARAM offers different models of Shoes incorporated with Steel Toe or with Composite Toe.

KARAM Steel-Toe:

- The Steel Toe caps used in KARAM Shoes are manufactured from Carbon Steel.
- Have a surface finish to make them highly corrosion resistant.
- Tested and certified as per **EN ISO 22568-1**

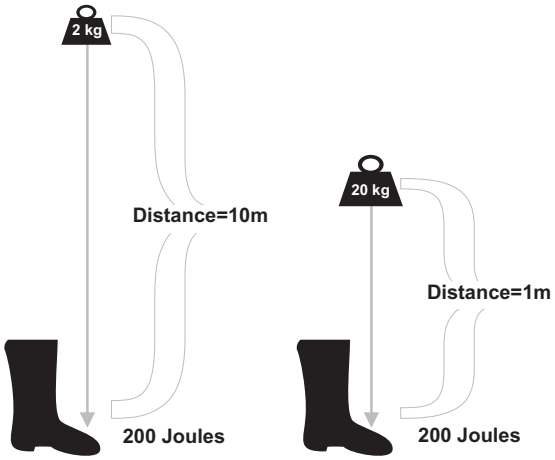


KARAM Composite-Toe:

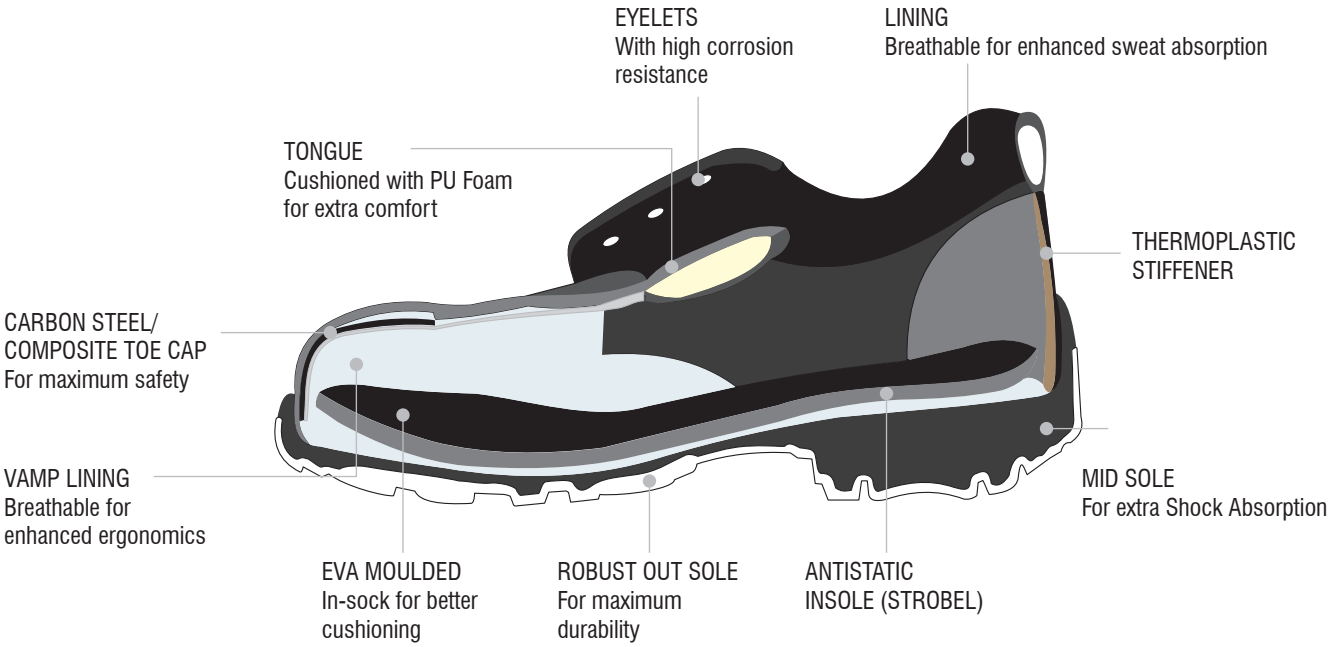
- KARAM Shoe models come incorporated with the special Composite Toe, which is made of high strength Polymer.
- Extremely light in weight.
- Tested and certified as per **EN ISO 22568-2**



They are tested to withstand an impact load of 200J, and a Compression load of 15 kN.



KARAM SAFETY FOOTWEAR



SYMBOLS USED FOR SAFETY SHOES



100% Grain Leather


Slip-Resistant Tread Pattern


Antistatic Shoe


Summer Shoe


Anti-bacterial Property


Oil and Fuel Resistant Sole


ESD


Toe Protection


Penetration Protection


Shock Absorbant Heel


Ankle Protection



Anti-Fatigue


Heat Resistance


Heat Insulation


Cold Insulation



300°C Heat Resistance


Slip Resistant


Light Weight


Flyknit Fabric


Composite Toe

PU IN SOCKS

FEATURES:

- Full-length polyurethane insoles evenly distribute body weight across your feet
- Offer arch support, flexibility, and relief for sore, tired, burning, or aching feet
- Help reduce pain in the ankles, legs, and lower back
- Sweat-absorbent and breathable design
- Provide high-rebound performance
- Offer extra cushioning for added comfort

PU MOULDED IN SOCKS


FRONT **BACK**

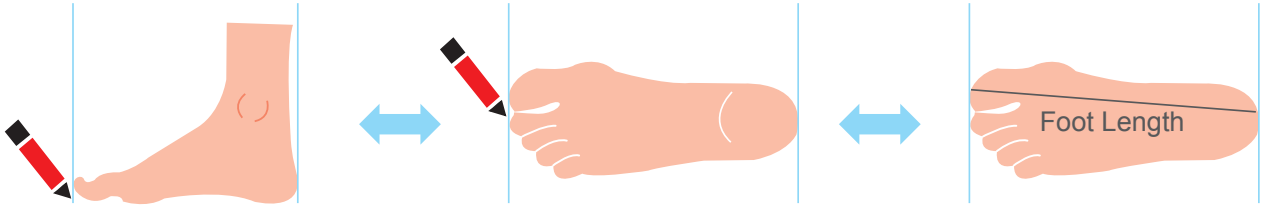
"KARAM – AIMING TO WALK TOWARD A GREENER TOMORROW, ONE STEP AT A TIME"

KARAM believes in a holistic approach to sustainability, integrating environmental responsibility into every aspect of our operations. We focus on reducing emissions, optimizing rainwater use, and managing wastewater while prioritizing responsibly sourced materials and exploring climate-neutral fuel alternatives. Excitingly, we will soon launch recyclable shoes made from eco-friendly materials, promoting sustainable practices. Additionally, we value our people by offering benefits that foster well-being and uphold ethical practices. For us, true progress balances environmental care with social responsibility, ensuring a sustainable future for all.

CHOOSING THE RIGHT SHOE SIZE

UK/INDIA	3	4	5	6	7	8	9	10	11	12	13
EU	36	37	38	39	40	41	42	43	44	45	46
USA	4	5	6	7	8	9	10	11	12	13	14
Foot Length (cms)	23.1	23.9	24.7	25.5	26.3	27.1	27.9	28.7	29.5	30.3	31.1
Foot Length (inches)	9.1	9.4	9.7	10	10.4	10.7	11	11.3	11.6	11.9	12.2

Measure your foot length as per below steps (please do not measure the insole length)



SAFETY SHOE DESIGNS IDENTIFICATION



Design A

Low Shoe



Design B

Ankle Boot



Design C

Half-knee Boot

NEW

Falkon RANGE

KARAM introduces FALKON range of Shoes specially designed with a sporty and sturdy feel for comfortable working in industrial as well as outdoor scenarios.

Sturdy Build

Low Ankle for Regular Fit

Sporty and Light Weight Design



Water-Repellent and Highly Breathable Upper





Ref: FS 251GR

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing, Maintenance.

DESCRIPTION
Uniquely designed grey microfiber with black fabric, lace up low ankle footwear with double density EVA mid sole and rubber out sole with antistatic property, along with a non-metallic toe cap.

DISTINGUISHED FEATURES
- Ultra-light weight and flexible.
- Extremely comfortable.
- 100% metal-free shoe.
- Highly breathable and Sweat absorption.
- **Lining: Soft Red Fabric**

EN ISO 20345:2022 IS 15298(Part-02)



Ref: FS 251BL

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing, Maintenance.

DESCRIPTION
Uniquely designed grey microfiber with black fabric, lace up low ankle footwear with double density EVA mid sole and rubber out sole with antistatic property, along with a non-metallic toe cap.

DISTINGUISHED FEATURES
- Ultra-light weight and flexible.
- Extremely comfortable.
- 100% metal-free shoe.
- Highly breathable and Sweat absorption.
- **Lining: Soft Grey Fabric**

EN ISO 20345:2022 IS 15298(Part-02)



Ref: FS 252OL

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing, Maintenance.

DESCRIPTION
Uniquely designed Olive Suede Leather with Olive fabric, lace up low ankle footwear with double density EVA mid sole and rubber out sole with antistatic property, along with a non-metallic toe cap.

DISTINGUISHED FEATURES
- Ultra-light weight and flexible.
- Extremely comfortable.
- 100% metal-free shoe.
- Highly breathable and sweat absorption.

EN ISO 20345:2022 IS 15298(Part-02)

* Actual color may vary with the picture of the shoe



Ref: FS 258BL

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing, Maintenance.

DESCRIPTION
Uniquely designed Black Microfiber Leather with Black fabric, lace up low ankle footwear with double density EVA mid sole and rubber out sole with antistatic property, along with a non-metallic toe cap.

DISTINGUISHED FEATURES
- Ultra-light weight and flexible.
- Extremely comfortable.
- 100% metal-free shoe.
- Highly breathable and Sweat absorption.

EN ISO 20345:2022 IS 15298(Part-02)



Ref: FS 259 BLUE

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing, Maintenance.

DESCRIPTION
Uniquely designed Black Crazy Horse Leather with Blue fabric, lace up low ankle footwear with double density EVA mid sole and rubber out sole with antistatic property, along with a non-metallic toe cap.

DISTINGUISHED FEATURES
- Ultra-light weight and flexible.
- Extremely comfortable.
- 100% metal-free shoe.
- Highly breathable and Sweat absorption.

EN ISO 20345:2022 IS 15298(Part-02)



Ref: FS 260BL

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing, Maintenance.

DESCRIPTION
Uniquely designed Black Suede Leather with Black fabric, lace up low ankle footwear with double density EVA mid sole and rubber out sole with antistatic property, along with a non-metallic toe cap.

DISTINGUISHED FEATURES
- Ultra-light weight and flexible.
- Extremely comfortable.
- 100% metal-free shoe.
- Highly breathable and Sweat absorption.

EN ISO 20345:2022 IS 15298(Part-02)

* Actual color may vary with the picture of the shoe

Technical Snapshot			
Ref.	**FS 251GR**	**FS 251BL**	**FS 252OL**
Upper	Micro Fiber with Black Fabric	Micro Fiber with Black Fabric	Olive Suede Leather with Olive Fabric
Lining	Soft Red Fabric	Soft Grey Fabric	Soft Beige Fabric
Vamp Lining	Non-Woven Fabric	Non-Woven Fabric	Non-Woven Fabric
In-sock	Soft PU Moulded and laminated with fabric	Soft PU Moulded and laminated with fabric	Soft PU Moulded and laminated with fabric
Toe	Fiber/Composite Toe	Fiber/Composite Toe	Fiber/Composite Toe
Sole	Double density compressed EVA mid sole and rubber outsole	Double density compressed EVA mid sole and rubber outsole	Double density compressed EVA mid sole and rubber outsole
Outsole	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats
Conforms to	**EN ISO 20345:2022**	**EN ISO 20345:2022**	**EN ISO 20345:2022**
Protection Level	S1, CI, HI and HRO	S1, CI, HI and HRO	S1, CI, HI and SRC
Category	Design A	Design A	Design A
Size	6-11	6-11	6-11

Technical Snapshot			
Ref.	**FS 258BL**	**FS 259 BLUE**	**FS 260BL**
Upper	Black Microfiber Leather with Black Fabric	Black Crazy Horse Leather with Blue Fabric	Black Suede Leather with Black Fabric
Lining	Soft Black Fabric	Soft Black Fabric	Soft Beige Fabric
Vamp Lining	Non-Woven Fabric	Non-Woven Fabric	Non-Woven Fabric
In-sock	Soft PU Moulded and laminated with fabric	Soft PU Moulded and laminated with fabric	Soft PU Moulded and laminated with fabric
Toe	Fiber/Composite Toe	Fiber/Composite Toe	Fiber/Composite Toe
Sole	Double density compressed EVA mid sole and rubber outsole	Double density compressed EVA mid sole and rubber outsole	Double density compressed EVA mid sole and rubber outsole
Outsole	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats
Conforms to	**EN ISO 20345:2022**	**EN ISO 20345:2022**	**EN ISO 20345:2022**
Protection Level	S1, CI, HI and HRO	S1, CI, HI and HRO	S1, CI, HI and HRO
Category	Design A	Design A	Design A
Size	6-11	6-11	6-11

NEW

METATARSAL SHOES

KARAM introduces the Metatarsal Shoes specifically meant for protection to the Metatarsal bones. Equipped with Metatarsal guard, these shoes deflect and disperse the impact of falling debris, objects and hazardous material keeping the feet well protected against compression injuries in and around the work place.

Enhanced cushioning for increased comfort

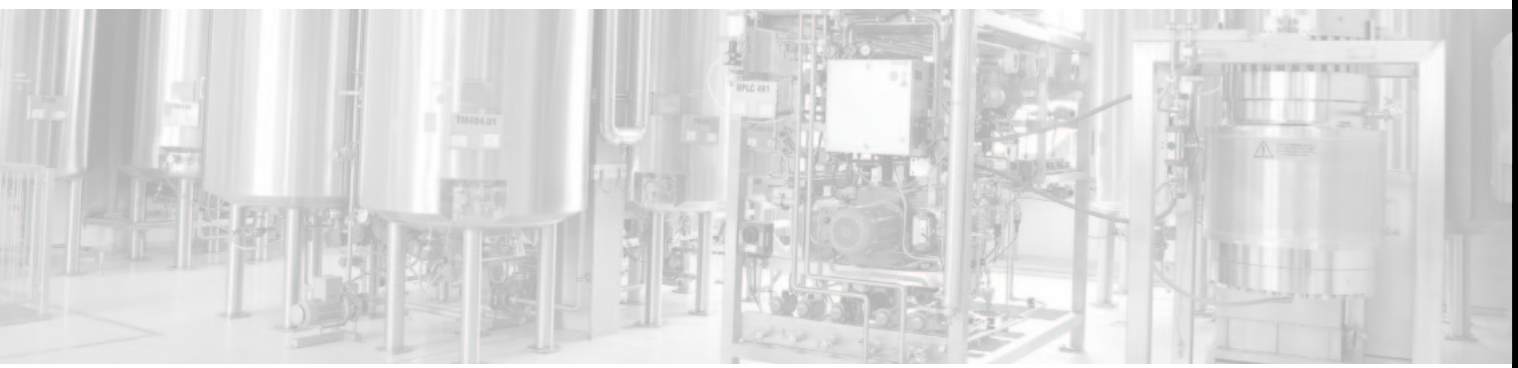
Ultimate protection to metatarsal bones

100% non-metallic



Sustains surface resistance to hot contact upto 300°C for one minute

Easy Velcro adjustment for metatarsal guard







Easy to open and close metatarsal guard using velcro attachment

Ref: FS 253(MT)(RO)

IDEAL FOR USE

Engineering Industry, Construction Site, Metal, Steel Industry, Transportation, General Industry, Manufacturing, Maintenance and Welding Operations.

GENERAL FEATURE

Premium safety shoe meant exclusively for providing protection to the metatarsal bones.

DISTINGUISHED FEATURES

- Comes with non-metallic metatarsal guard to protect the metatarsal bones from the impact of falling debris, objects and hazardous material
- Easy velcro adjustment for metatarsal guard for wearer's comfort
- Sustains surface resistance to hot contact upto 300°C for one minute
- Attractive yellow contrast stitching with good quality nylon thread
- Has PU nitrile rubber sole for high durability, excellent grip and slip resistance
- Non-metallic eyelets and flat laces for better Knotting grip
- 100% non-metallic shoe



CE

EN ISO 20345:2022

Technical Snapshot	
Ref.	**FS 253(MT)RO**
Upper	Buff Black Grain Barton Leather
Lining	Soft Black Netlon inner lining with Foam backing
Vamp Lining	Highly abrasion resistant non-woven fabric lining
In-sock	Extra cushioned soft PU molded in-sock for extra comfort
Toe	Composite Toe
Sole	PU and Nitrile Sole
Outsole	Dual Density Cleated outsole with wider cleats
Conforms to	EN ISO 20345:2022
Protection Level	S1, CI & HI
Category	Design B
Size	3-13

FLYTEX®
SAFETY FOOTWEAR

KARAM Introduces a range of Flytex Safety Footwear equipped with all the significant features to ensure safety against extreme odds and to facilitate comfortable walk and work.
The range is a perfect blend of Breathability, Comfort, Safety and Style.

Scan here *for a virtual tour of the product*

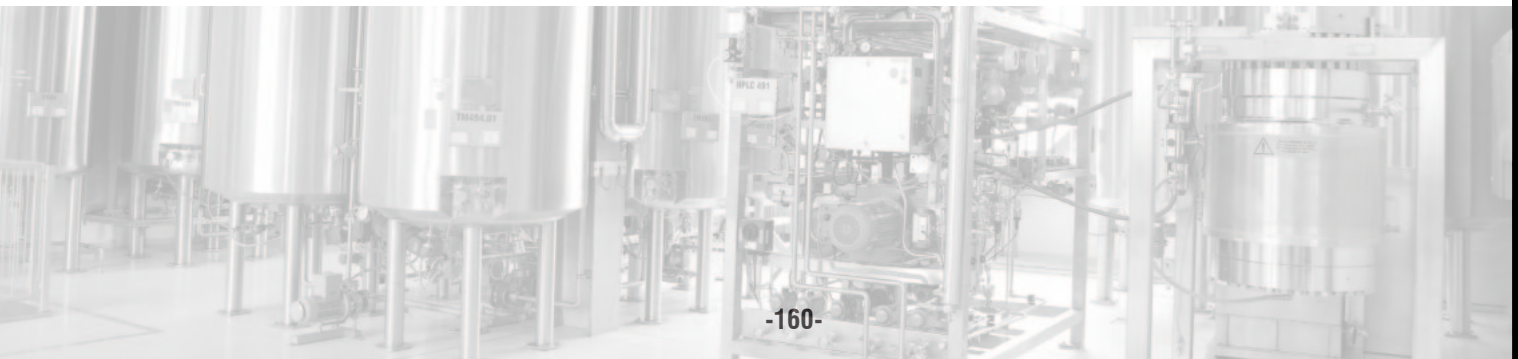
Smart, Stylish and Fashionable

100% Metal Free Shoe



Highly Breathable Upper

Strongest Sole Bonding





Ref: FS 201

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION
Smart, stylish and fashionable safety shoe.

DISTINGUISHED FEATURES
- Highly breathable.
- Ultra-light weight and flexible.
- Extremely comfortable.
- Provides protection against electrical hazards.
- 100% metal-free shoe.
- Equipped with strongest sole bonding.

EN ISO 20345:2022 IS 15298(Part-02)



Ref: FS 202

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION
Safety Shoe with a perfect blend of breathability, comfort, safety and style.

DISTINGUISHED FEATURES
- Ultra-light weight and flexible.
- Extremely comfortable.
- Provides protection against electrical hazards.
- 100% metal-free shoe.
- Highly breathable.
- Equipped with strongest sole bonding.

EN ISO 20345:2022 IS 15298(Part-02)



Ref: FS 203

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION
The lightest, flexible and comfortable footwear.

DISTINGUISHED FEATURES
- Ultra-light weight and flexible.
- Extremely comfortable.
- Provides protection against electrical hazards.
- 100% metal-free shoe.
- Highly breathable.
- Equipped with strongest sole bonding.

EN ISO 20345:2022 IS 15298(Part-02)

* Actual color may vary with the picture of the shoe



Ref: FS 204

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION
Ultra-light weight and flexible sporty shoe.

DISTINGUISHED FEATURES
- Ultra-light weight and flexible.
- Extremely comfortable.
- Provides protection against electrical hazards.
- 100% metal-free shoe.
- Highly breathable.
- Equipped with strongest sole bonding.



EN ISO 20345:2022 IS 15298(Part-02)

Technical Snapshot				
Ref.	**FS 201**	**FS 202**	**FS 203**	**FS 204**
Upper	Flyknit fabric upper with white and dark grey color combination	Flyknit fabric upper with black and red color print	Flyknit fabric upper with black and blue color print	Flyknit fabric upper with black and blue color print
Lining	Breathable soft black netlon fabric lining	Breathable soft fabric lining	Breathable soft fabric lining	Breathable soft fabric lining
Vamp Lining	Non-woven fabric	Non-woven fabric	Non-woven fabric	Non-woven fabric
In-sock	Anti fatigue molded EVA/ PU insocks laminated with soft black netlon fabric for better cushioning	Anti fatigue molded EVA/ PU insocks laminated with soft black netlon fabric for better cushioning	Anti fatigue molded EVA/ PU insocks laminated with soft black netlon fabric for better cushioning	Anti fatigue molded EVA/ PU insocks laminated with soft black netlon fabric for better cushioning
Toe	Composite toe cap	Composite toe cap	Composite toe cap	Composite toe cap
Sole	Single density PU sole	Single density PU sole	Single density PU sole	Single density PU sole
Outsole	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats
Certified t	EN ISO 20345:2022 **Conforms to IS 15298(Part-02)**	EN ISO 20345:2022 **Conforms to IS 15298(Part-02)**	EN ISO 20345:2022 **Conforms to IS 15298(Part-02)**	EN ISO 20345:2022 **Conforms to IS 15298(Part-02)**
Protection Level	S1, CI, HI & SR	S1, CI, HI & SR	S1, CI, HI & SR	S1, CI, HI & SR
Category	Design A	Design A	Design A	Design A
Size	3-13	3-13	3-13	3-13

* Actual color may vary with the picture of the shoe



Ref: FS 208

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION
Sporty shoe for comfortable walk and work.

DISTINGUISHED FEATURES

- Ultra-light weight and flexible.
- Extremely comfortable.
- Provides protection against electrical hazards.
- 100% metal-free shoe.
- Highly breathable.
- Equipped with strongest sole bonding.

EN ISO 20345:2022 IS 15298(Part-02)



Ref: FS 210

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION
Smart, stylish and fashionable safety shoe.

DISTINGUISHED FEATURES

- Ultra-light weight and flexible.
- Extremely comfortable.
- Provides protection against electrical hazards.
- 100% metal-free shoe.
- Highly breathable.
- Equipped with strongest sole bonding.

EN ISO 20345:2022 IS 15298(Part-02)



Ref: FS 213

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION
Breathable and comfortable safety shoe with a sporty look.

DISTINGUISHED FEATURES

- Ultra-light weight and flexible.
- Extremely comfortable.
- Provides protection against electrical hazards.
- 100% metal-free shoe.
- Highly breathable.
- Equipped with strongest sole bonding.

EN ISO 20345:2022 IS 15298(Part-02)

* Actual color may vary with the picture of the shoe



Ref: FS 215

IDEAL FOR USE
In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION
Smart, stylish and breathable safety shoe with a sporty look.

DISTINGUISHED FEATURES
- Ultra-light weight and flexible.
- Extremely comfortable.
- Provides protection against electrical hazards.
- 100% metal-free shoe.
- Highly breathable.
- Equipped with strongest sole bonding.

EN ISO 20345:2022 IS 15298(Part-02)

Technical Snapshot

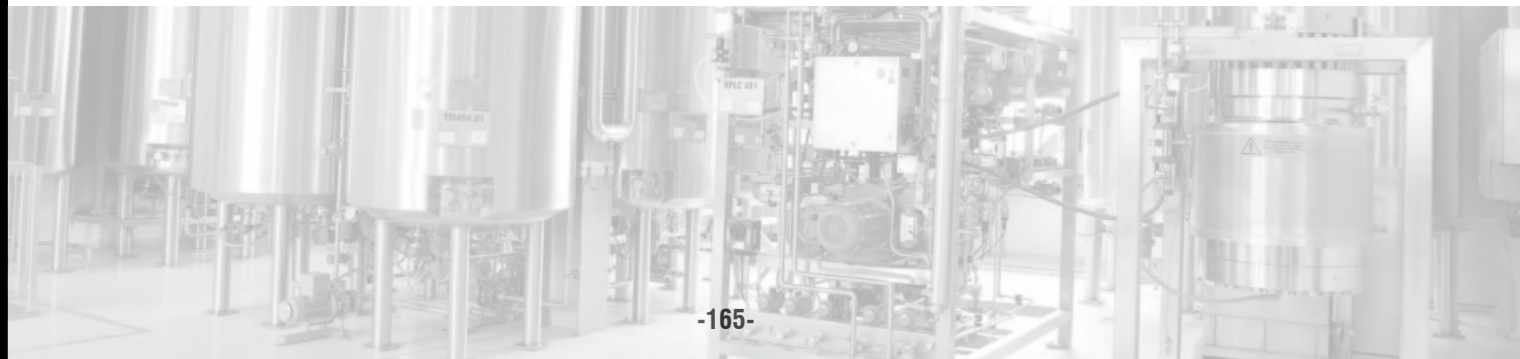
Ref.	FS 208	FS 210	FS 213	FS 215
Upper	Flyknit fabric upper with black and white color print	Flyknit fabric upper with black and orange color print	Flyknit fabric upper with grey and red color print	Flyknit fabric upper with black and red color print
Lining	Breathable soft fabric lining	Breathable soft fabric lining	Breathable soft fabric lining	Breathable soft fabric lining
Vamp Lining	Non-woven fabric	Non-woven fabric	Non-woven fabric	Non-woven fabric
In-sock	Anti fatigue molded EVA/ PU insocks laminated with soft black netlon fabric for better cushioning	Anti fatigue molded EVA/ PU insocks laminated with soft black netlon fabric for better cushioning	Anti fatigue molded EVA/ PU insocks laminated with soft black netlon fabric for better cushioning	Anti fatigue molded EVA/ PU insocks laminated with soft black netlon fabric for better cushioning
Toe	Composite toe cap	Composite toe cap	Composite toe cap	Composite toe cap
Sole	Single density PU sole	Single density PU sole	Single density PU sole	Single density PU sole
Outsole	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats
Certified t	EN ISO 20345:2022 **Conforms to IS 15298(Part-02)**	EN ISO 20345:2022 **Conforms to IS 15298(Part-02)**	EN ISO 20345:2022 **Conforms to IS 15298(Part-02)**	EN ISO 20345:2022 **Conforms to IS 15298(Part-02)**
Protection Level	S1, CI, HI & SR	S1, CI, HI & SR	S1, CI, HI & SR	S1, CI, HI & SR
Category	Design A	Design A	Design A	Design A
Size	3-13	3-13	3-13	3-13

* Actual color may vary with the picture of the shoe

ABAWRF RANGE

KARAM introduces ABAWRF range of Shoes specially designed with additional feature of being water-repellent; hence, providing extreme comfort in long working hours.







ABAWRF PREMIUM SHOE

Ref. FS 13

IDEAL FOR USE

In food and pharmaceutical industry.

DESCRIPTION

Water repellent slip-on shoe with all-day long comfort.

DISTINGUISHED FEATURES

- Water repellent upper
- Lightweight design
- Increased air circulation

IS 15298(Part-02) EN ISO 20345:2011



ABAWRF EXECUTIVE SHOE

Ref. FS 14

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Water repellent derby style low ankle protection shoe.

DISTINGUISHED FEATURES

- Water repellent upper
- Lightweight design
- Increased air circulation
- Low-ankle for quick movements

IS 15298(Part-02) EN ISO 20345:2011



ABAWRF REFLECTIVE SHOE

Ref. FS 15

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Water repellent sporty style low ankle protection Shoe.

DISTINGUISHED FEATURES

- Water repellent upper
- Lightweight design
- Increased air circulation
- Reflective tapes on shoe for higher visibility in the dark.
- Low-ankle for quick movements

IS 15298(Part-02) EN ISO 20345:2011

* Actual color may vary with the picture of the shoe



ABAWRF HIGH ANKLE SHOE

Ref. FS 25

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Water repellent derby designed high ankle protection shoe.

DISTINGUISHED FEATURES

- Water repellent upper
- Lightweight design
- Increased air circulation
- High-ankle shoes for more stability and shock absorption

IS 15298(Part-02) EN ISO 20345:2011

Technical Snapshot				
Ref.	**FS 13**	**FS 14**	**FS 15**	**FS 25**
Upper	Micro fiber din leather	Micro fiber din leather	Micro fiber din leather	Micro fiber din leather
Lining	Grey cambrelle	Netlon padded with foam	Netlon padded with foam	Netlon padded with foam
Vamp Lining	Highly abrasion resistant non woven fabric lining	Highly abrasion resistant non woven fabric lining	Highly abrasion resistant non woven fabric lining	Highly abrasion resistant non woven fabric lining
In-sock	Anti fatigue molded EVA/ PU insocks	Anti fatigue molded EVA/ PU insocks	Anti fatigue molded EVA/ PU insocks	Anti fatigue molded EVA/ PU insocks
Toe	Composite	Composite	Composite	Composite
Sole	Single density PU sole	Single density PU sole	Double density PU sole	Single density PU sole
Outsole	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats
Certified t	EN ISO 20345:2011 IS 15298(Part-02)	EN ISO 20345:2011 IS 15298(Part-02)	EN ISO 20345:2011 IS 15298(Part-02)	EN ISO 20345:2011 IS 15298(Part-02)
Protection Level	S2	S2	S2	S2
Category	Design A	Design A	Design A	Design B
Size	3-13	3-13	3-13	3-13

* Actual color may vary with the picture of the shoe

SAFETY SHOES WITH DOUBLE DENSITY PU/PU SOLE

KARAM offers a wide range of shoes having double density PU/PU soles which are injection moulded onto the Shoe. These double density PU/PU outsoles provide ultimate shock absorption and durability, while remaining light in weight and flexible.

Extra Corrosion Resistance Eyelets

Ultimate Shock Absorption



Highly Durable

Light in Weight

Carbon Steel Toe Cap for Maximum Safety





Ref. FS 01

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Smart elegant executive shoe for complete foot safety.

DISTINGUISHED FEATURES

- Red stitching with bonded thread.
- Excellent grip, comfort and slip resistance.

IS 15298(Part-02) EN ISO 20345:2022



Ref. FS 21

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Fast wearing and quick release lace up shoe.

DISTINGUISHED FEATURES

- Has bellow tongue which prevents spillage of water and liquids inside the Shoe.
- Metallic D-ring and flat laces for better knotting grip.
- Red stitching with bonded thread.
- Excellent grip, comfort and slip resistance.

IS 15298(Part-02) EN ISO 20345:2022

* Actual color may vary with the picture of the shoe



Ref. FS 22

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

An ankle height quick-release boot. Extremely easy to remove in case of injury to the foot.

DISTINGUISHED FEATURES

- Equipped with a unique special keeper for releasing the boot in case of injury to the foot.
- Excellent grip, comfort and slip resistance.



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



IS 15298(Part-02) EN ISO 20345:2022



Ref. FS 51

IDEAL FOR USE

In oil, gas and petroleum industry.

DESCRIPTION

High ankle boot integrated with fire retardant threads specific for hot working conditions.

DISTINGUISHED FEATURES

- High ankle design and fire-retardant thread provides extra safety to the foot while working on the hot surfaces upto 120 degree celsius.
- Excellent grip, comfort and slip resistance.



IS 15298(Part-02) EN ISO 20345:2022

* Actual color may vary with the picture of the shoe



Ref. FS 61

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Smart elegant executive shoe for complete foot safety.

DISTINGUISHED FEATURES

- Metallic hexagonal eyelets.
- Round brown laces.
- Brown leather upper and beige lining.
- The breathable drylex lining, 3D fabric (being used as a quarter lining in the Shoes) prevents moisture and perspiration, and provides high sweat absorption property for a dry feel. It is also highly resistant to abrasion.

IS 15298(Part-02) EN ISO 20345:2022

Technical Snapshot					
Ref.	**FS 01**	**FS 21**	**FS 22**	**FS 51**	**FS 61**
Upper	Full grain leather	Full grain leather	Full grain leather topline with codura	Full grain buff waxy din leather	Buff brown grain leather
Lining	Netlon padded with foam	Netlon padded with foam	Special breathable drylex lining, 3D fabric	Unlined shoe	Special breathable drylex lining, 3D fabric
Vamp Lining	Highly abrasion resistant non woven fabric lining	Highly abrasion resistant non woven fabric lining	Highly abrasion resistant non woven fabric lining	Highly abrasion resistant non woven fabric lining	Comfortable, breathable soft fleece lining
In-sock	5mm Anti fatigue molded EVA/PU insocks laminated with netlon	5mm Anti fatigue molded EVA/PU insocks laminated with netlon	5mm Anti fatigue molded EVA/PU insocks laminated with netlon	5mm Anti fatigue molded EVA/PU insocks laminated with netlon	Anti fatigue molded EVA/PU insocks
Toe	Steel	Steel	Steel	Steel	Steel
Sole	Double density PU/ PU sole	Double density PU/ PU sole	Double density PU/ PU sole	Double density PU/ PU sole	Double density PU/ PU sole
Outsole	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats
Certified t	EN ISO 20345:2022 IS 15298(Part-02)	EN ISO 20345:2022 IS 15298(Part-02)	EN ISO 20345:2022 IS 15298(Part-02)	EN ISO 20345:2022 IS 15298(Part-02)	EN ISO 20345:2022 IS 15298(Part-02)
Protection Level	S1 CI , HI & SR	S1 CI , HI & SR	S1	S1	S1
Category	Design A	Design B	Design B	Design C	Design A
Size	3-13	3-13	3-13	3-13	3-13

* Actual color may vary with the picture of the shoe

SAFETY SHOES WITH DOUBLE DENSITY PU/TPU SOLE

KARAM offers a wide range of Shoes having Double Density PU/TPU which are injection moulded onto the Shoe. These Double Density PU/TPU Outsoles offer excellent abrasion resistance, slip resistance, extra comfort and flexibility.

Slip Resistance

Highly Flexible and Comfortable

Excellent Abrasion Resistance



Stylish and Fashionable Look



Ref. FS 62

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Safety shoe equipped with all the features of comfort, robust looks and highest level of safety.

DISTINGUISHED FEATURES

- Reflective tapes on shoe for high visibility in the dark.
- Equipped with non-metallic eyelets and flat laces for better knotting grip.
- Codura fabric enhances breathability, makes shoe lighter in weight. It is more durable and flexible.
- Foam padded tongue enhance fit and comfort.



IS 15298(Part-02) EN ISO 20345:2022



Ref. FS 63

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Safety shoe equipped with all the features of comfort, robust looks and highest level of safety.

DISTINGUISHED FEATURES

- Extended top line for wider foot coverage.
- Equipped with reflective tapes on Shoe for high visibility in the dark.
- Codura fabric enhances breathability, makes Shoe lighter in weight.
- Is more durable and flexible.



IS 15298(Part-02) EN ISO 20345:2022

* Actual color may vary with the picture of the shoe



Ref. FS 64

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Premium executive shoe with soft suede leather providing the finest features in safety and comfort.

DISTINGUISHED FEATURES

- Equipped with perforated quarters for extended air flow to reduce sweat and odour.
- Light weight metallic strong D-ring eyelets.
- Durable and flexible.

IS 15298(Part-02) EN ISO 20345:2022



Ref. FS 65

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Uniquely designed ankle protection Shoe.

DISTINGUISHED FEATURES

- Has composite toe.
- Equipped with textile loop eyelets with high visibility reflective tape.
- Non-metallic shoe-ideal for transmission industry, pharmaceutical and electronic industry.
- Extremely light in weight.
- Foam padding in bellow tongue to enhance fit and comfort.

IS 15298(Part-02) EN ISO 20345:2011



* Actual color may vary with the picture of the shoe

Technical Snapshot				
Ref.	**FS 62**	**FS 63**	**FS 64**	**FS 65**
Upper	Buff black crazy horse leather and codura grey	Buff black crazy horse leather and codura black	Soft breathable suede grey leather	Buff brown crazy horse leather and codura brown
Lining	Breathable grey drylex lining, 3D fabric	Attractive orange spacer lining, 3D fabric	Attractive grey spacer lining, 3D fabric	Orange spacer lining, 3D fabric
Vamp Lining	Comfortable, breathable soft fleece lining	Comfortable, breathable soft fleece lining	Comfortable, breathable soft fleece lining	Highly abrasion resistant fabric lining
In-sock	Anti fatigue molded EVA/PU insocks	Anti fatigue molded EVA/PU insocks	Anti fatigue molded EVA/PU insocks	Anti fatigue molded EVA/PU insocks
Toe	Steel	Steel	Steel	Composite
Sole	Double density PU/TPU sole	Double density PU/TPU sole	Double density PU/TPU sole	Double density PU/TPU sole
Outsole	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats
Certified t	EN ISO 20345:2022 IS 15298(Part-02)	EN ISO 20345:2022 IS 15298(Part-02)	EN ISO 20345:2022 IS 15298(Part-02)	EN ISO 20345:2011 IS 15298(Part-02)
Protection Level	S1	S1	S1	S1P
Category	Design A	Design A	Design A	Design B
Size	3-13	3-13	3-13	3-13

SAFETY SHOES WITH SINGLE DENSITY PU SOLE

KARAM offers a wide range of Shoes having Single Density PU Sole which are injection moulded onto the Shoe. Single Density PU outsole imparts high level of energy absorption.

Increased Energy Absorption

Cleated Outsole for firm Grip on uneven ground and slippery surfaces







Ref. FS 02

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Elegant workman's choice safety Shoe providing safety with comfort.

DISTINGUISHED FEATURES

- Has smart grey stitching with bonded thread.
- Comes with excellent grip, comfort and slip resistance.

IS 15298(Part-02) EN ISO 20345:2022



Ref. FS 04

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

New executive choice slip-on Shoe for the smart executive on the move.

DISTINGUISHED FEATURES

- Easy slip-on design and cushioned top-line.
- Comes with excellent grip, comfort and slip resistance.

IS 15298(Part-02) EN ISO 20345:2022



Ref. FS 05

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Worker's safety shoe providing safety with comfort.

DISTINGUISHED FEATURES

Comes with excellent grip, comfort and slip resistance.

IS 15298(Part-02) EN ISO 20345:2022

* Actual color may vary with the picture of the shoe



Ref: FS 055

IDEAL FOR USE
Ideal for Engineering Industry, Metal, Steel Industry, General Industry, Manufacturing and Maintenance.

DESCRIPTION
Smart lace up safety shoe with liquid splash protection and enhanced comfort for long working hours.

DISTINGUISHED FEATURES
- Leather upper with high breathability and sweat absorption
- Metal D-rings enable speed lacing
- Bellow tongue ensures excellent protection against liquid splashes and metal chips
- Contrast stitching for easy identification/ better visual appeal/ adds to the style.



IS 15298(Part-02)

Technical Snapshot				
Ref.	**FS 02**	**FS 04**	**FS 05**	**FS 055**
Upper	Full grain leather	Full grain leather	Full grain leather	Buff Black Grain Barton Leather
Lining	Grey cambrelle lining	Netlon padded with foam	Black Cambrelle lining	Soft Grey Drylex Inner lining with foam backing
Vamp Lining	Highly abrasion resistant non woven fabric lining	Highly abrasion resistant non woven fabric lining	Highly abrasion resistant non woven fabric lining	Highly abrasion resistant non-woven fabric lining
In-sock	5mm Anti fatigue molded EVA/PU insocks laminated with netlon	5mm Anti fatigue molded EVA/PU insocks laminated with netlon	5mm Anti fatigue molded EVA/PU insocks laminated with netlon	Soft Molded EVA and laminated with Black Netlon Fabric
Toe	Steel	Steel	Steel	Steel
Sole	Single density PU sole	Single density PU sole	Single density PU sole	Single Density PU
Outsole	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Single Density Cleated outsole with wider cleats
Certified t	EN ISO 20345:2022 IS 15298 (Part-02) DGMS	EN ISO 20345:2022 IS 15298 (Part-02) DGMS	EN ISO 20345:2022 IS 15298 (Part-02)	IS 15298(Part-02)
Protection Level	S1	S1	S1	S1, CI & HI
Category	Design A	Design A	Design A	Design A
Size	3-13	3-13	3-13	3-13

* Actual color may vary with the picture of the shoe



Ref. FS 69

IDEAL FOR USE

In telecom, pharmaceutical and general industry set up.

DESCRIPTION

Smart, stylish and fashionable premium executive Shoe with soft suede leather providing the finest features in safety and comfort.

DISTINGUISHED FEATURES

- Lightweight.
- Codura fabric enhances breathability, makes Shoe lighter in weight.
- Durable and flexible.

IS 15298(Part-02)



Ref. FS 71

IDEAL FOR USE

In telecom, transmission, electronic and general industry set up.

DESCRIPTION

Smart lace up, high end and light weight executive Shoe.

DISTINGUISHED FEATURES

- Moccasin design having a broad area for extended comfort.
- Has light weight nail-guard and anti-perforation mid-sole to provide maximum safety, along with great flexibility to the foot.
- Comfortable fabric lining of the Shoes also makes it sweat and odour free.
- Available in options of 2 colours-black and chocolate brown.

IS 15298(Part-02) EN ISO 20345:2011



Ref. FS 72

IDEAL FOR USE

In telecom, transmission, pharmaceutical and general industry set up.

DESCRIPTION

Attractive design light weight slip on Shoe.

DISTINGUISHED FEATURES

- Moccasin design having broad area for extended comfort.
- Has light weight nail-guard and anti-perforation mid-sole to provide maximum safety, along with great flexibility to the foot.
- Comfortable fabric lining of the Shoes also makes it sweat and odour free.
- Available in options of 2 colours-black and chocolate brown.

IS 15298(Part-02) EN ISO 20345:2011

* Actual color may vary with the picture of the shoe



Ref. FS 73

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics, Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Zero metal slip on shoe with padded top line for comfort.

DISTINGUISHED FEATURES

- Slip on with padded top line for comfort.
- Design with broad toe area for extended comfort.
- Moulded in-sock for anti fatigue property.
- Has light weight nail-guard and anti-perforation mid-sole to provide maximum safety, along with great flexibility to the foot.
- Comfortable fabric lining of the Shoes also makes it sweat and odour free.
- Also available in black color in cow venus leather.

IS 15298(Part-02) EN ISO 20345:2011

Technical Snapshot				
Ref.	**FS 69**	**FS 71**	**FS 72**	**FS 73**
Upper	Buff grey suede leather and codura black	Buff waxy grain din leather	Buff waxy grain din leather	Buff waxy grain din leather
Lining	Attractive orange spacer lining, 3D fabric	Black/grey fabric padded with soft foam	Black/grey fabric padded with soft foam	Leather lining
Vamp Lining	Highly abrasion resistant non woven fabric lining	Special fabric with foam support	Special fabric with foam support	Comfortable breathable soft fleece lining
In-sock	Anti fatigue molded EVA/PU insocks	Anti fatigue molded EVA/PU insocks	Anti fatigue molded EVA/PU insocks	Anti fatigue molded EVA/PU insocks
Toe	Steel	Composite	Composite	Composite
Sole	Single density PU sole	Single density PU sole	Single density PU sole	Single density PU sole
Outsole	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats
Certified t	**Conforms to IS 15298(Part-2)**	EN ISO 20345:2011 IS 15298(Part-02)	EN ISO 20345:2011 IS 15298(Part-02)	EN ISO 20345:2011 IS 15298(Part-02)
Protection Level	S1	S3	S3	S3
Category	Design A	Design A	Design A	Design A
Size	3-13	3-13	3-13	3-13

* Actual color may vary with the picture of the shoe



Ref: FS 226

IDEAL FOR USE

Ideal for General Industry, Telecommunication, Pharmaceutical, Transportation, Manufacturing, Automotive, Factories and Warehousing.

DESCRIPTION

Easy lace up safety shoe with premium design and comfort features for executives on the go for longer periods.

DISTINGUISHED FEATURES

- 100% metal-free shoe
- High breathability and sweat absorption upper
- Equipped with lace holders to prevent unnecessary loosening and help to keep the knot intact
- Extra cushioning on collar, tongue, and In-sock for day comfort
- Reflector at the back for easy visibility at night.

IS 15298:2016 EN ISO 20345:2022



Ref: FS 231

IDEAL FOR USE

Engineering Industry, Metal and Steel Industry, General Industry, Manufacturing. Automotive, Factories, Construction, Oil and Gas and Warehousing.

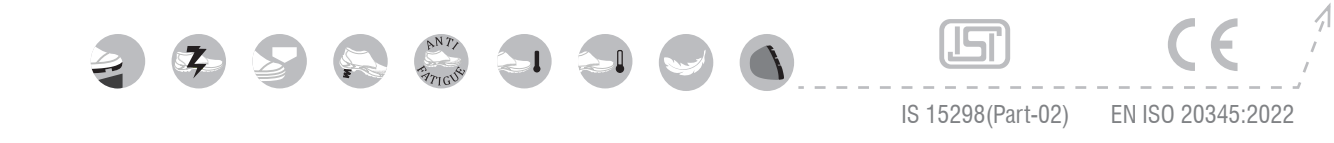
DESCRIPTION

Premium lace up high ankle safety shoe with liquid splash protection and all day long comfort.

DISTINGUISHED FEATURES

- High breathability and sweat absorption upper
- Dog hooks for speed lacing
- Bellow tongue ensures protection against liquid splashes and water slippage into the shoe
- Reflectors at the back for easy visibility at night
- Extra cushioning on collar, tongue, and in-sock for all-round comfort

IS 15298(Part-02) EN ISO 20345:2022





Ref: FS 232

IDEAL FOR USE
Engineering Industry, Metal, Steel Industry, General Industry, Manufacturing, Construction sites, Oil and Gas and Warehousing.

DESCRIPTION
Premium lace up high ankle safety shoe designed for excellent protection and all-day long comfort.

DISTINGUISHED FEATURES
- High breathability and sweat absorption upper
- Non-metallic D-Rings for speed lacing
- Dog Hooks provided as lace holders for preventing
- unnecessary loosening and keeping the knot intact
- Extra cushioning on collar, tongue and In-sock for all-round comfort
- Reflectors at quarter for easy visibility at night
- Contrast and patterned stitching for better visual appeal

IS 15298(Part-02) EN ISO 20345:2022

Technical Snapshot			
Ref.	**FS 226**	**FS 231**	**FS 232**
Upper	Buff Black Grain Crazy Horse Leather	Buff Black Grain Crazy Horse Leather	Buff Black Grain Crazy Horse Leather
Lining	Soft Grey Drylex Inner lining with foam backing	Soft Black Netlon Inner Lining with foam backing	Soft Grey Drylex Inner lining with foam backing
Vamp Lining	Highly abrasion resistant non-woven fabric lining	Highly abrasion resistant non-woven fabric lining	Highly abrasion resistant non-woven fabric lining
In-sock	Soft Molded EVA and laminated with Black Netlon Fabric	Soft Molded EVA and laminated with Black Netlon Fabric	Soft Molded EVA and laminated with Black Netlon Fabric
Toe	Composite	Steel	Steel
Sole	Single density PU sole	Single density PU sole	Single density PU sole
Outsole	Single Density Cleated outsole with wider cleats	Single Density Cleated outsole with wider cleats	Single Density Cleated outsole with wider cleats
Certified t	**Conforms to EN ISO 20345:2022** IS 15298:2016	**Conforms to EN ISO 20345:2022** IS 15298(Part-02)	**Conforms to EN ISO 20345:2022** IS 15298(Part-02)
Protection Level	S1, CI & HI	S1, CI & HI	S1, CI & HI
Category	Design A	Design B	Design B
Size	3-13	3-13	3-13



Ref. FS 150

IDEAL FOR USE

In institutions.

DESCRIPTION

Oxford dress Shoes specially designed for Institutional use.

DISTINGUISHED FEATURES

- Has special corrosion resistant aluminium eyelets.
- Cleated Outsole for firm Grip on uneven ground and slippery surfaces.

EN ISO 20345:2022 IS 15298(Part-02)



Ref. FS 151

IDEAL FOR USE

In paramilitary forces.

DESCRIPTION

Jungle boot specially designed for paramilitary forces.

DISTINGUISHED FEATURES

- Has special corrosion resistant aluminium eyelets.
- Comes with excellent grip, comfort, anti-slip and sweat absorbing properties.

IS 15298(Part-04)



Ref. FS 152

IDEAL FOR USE

In paramilitary forces.

DESCRIPTION

Ankle boot specially designed for paramilitary forces.

DISTINGUISHED FEATURES

- Has special corrosion resistant aluminium eyelets.
- Jug-loop design for easy hanging.

IS 15298(Part-04)

* Actual color may vary with the picture of the shoe



Ref. FS 100

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Lace up smart, slim design Shoe for the woman on the go.

DISTINGUISHED FEATURES

- Inbuilt anti-perforation nail guard insole.
- Padded tongue for enhanced comfort.
- Padded top line for comfort.

IS 15298(Part-02) EN ISO 20345:2022



Ref. FS 101

IDEAL FOR USE

In Telecommunication, Pharmaceutical, Automotive, Logistics Aviation, Transportation, General Industry, Manufacturing and Maintenance.

DESCRIPTION

Easy to wear ladies Safety Shoe with velcro fitment for women.

DISTINGUISHED FEATURES

- Equipped with velcro fitment.
- Oil/acid resistant with anti-slip and sweat absorbing properties.

IS 15298(Part-02) EN ISO 20345:2022

* Actual color may vary with the picture of the shoe

Technical Snapshot					
Ref.	**FS 150**	**FS 151**	**FS 152**	**FS 100**	**FS 101**
Upper	Buff corrected grain leather	Water repellent polyester viscous fabric with grain leather and hard toe	Buff grain leather	Buff waxy black grain leather	Buff grain leather
Lining	Leather lining	Cambrelle lining with foam padding	Cambrelle lining	Soft pink breathable spacer lining, 3d fabric	Netlon padded with foam
Vamp Lining	Highly abrasion resistant fabric lining	Soft cambrelle lining with foam padding	Highly abrasion resistant fabric lining	Comfortable, breath-able soft fleece lining	Highly abrasion resistant fabric lining
In-sock	5mm Anti fatigue molded EVA/PU insocks laminated with netlon	Anti fatigue molded EVA/PU insocks	Anti fatigue molded EVA/PU insocks	Anti fatigue molded EVA/PU insocks	Anti fatigue molded EVA/PU insocks
Toe	Steel	Hard toe	Hard toe	Composite	Composite
Sole	Single density PU sole	Single density PU sole	Single density PU sole	Single density PU sole	Single density PU sole
Outsole	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats
Certified t	EN ISO 20345:2011 **Conforms to IS 15298(Part-02)**	**Conforms to IS 15298(Part-04)**	**Conforms to IS 15298(Part-04)**	EN ISO 20345:2011 IS 15298(Part-02)	EN ISO 20345:2022 IS 15298(Part-02)
Protection Level	S1	NA	NA	S1P	S1
Category	Design A	Design B	Design B	Design A	Design A
Size	3-13	3-13	3-13	3-13	3-13

SAFETY FOOTWEAR WITH DOUBLE DENSITY PU NITRILE SOLE

KARAM offers new range of Safety Footwear with Double Density PU Nitrile sole for utmost comfort and safety. These Outsoles offer Excellent Grip, Comfort , Flexibility and Slip Resistance.

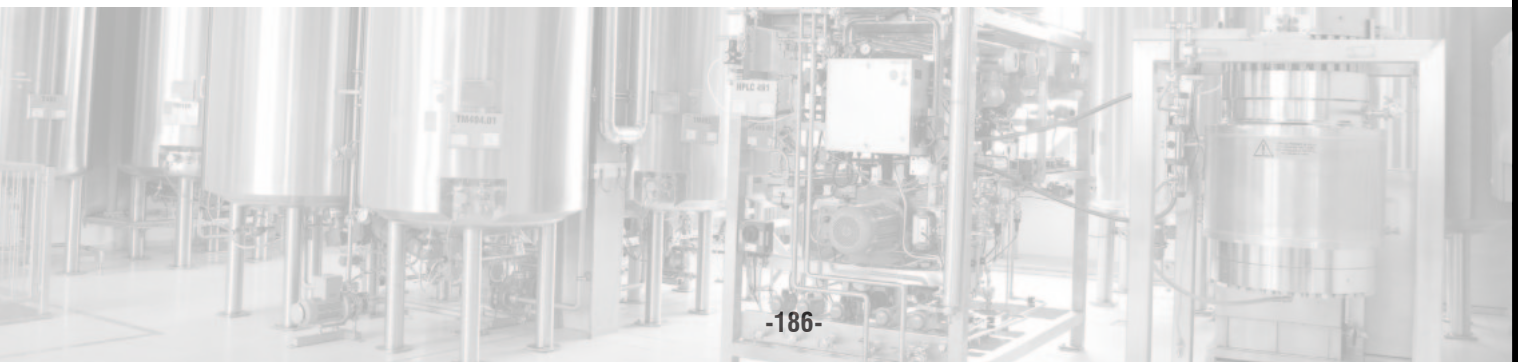
Sustains Surface Resistance to hot contact upto 300°C for one minute

Lightweight



Flexible

Offers Good Slip, Tear, Oil and Abrasion resistance.



Ref. FS 01RO



IDEAL FOR USE

In high temperature zones & hazardous chemical industries. It can be used for adventure, trekking & hiking purpose as well.

DESCRIPTION

Smart elegant executive Shoe for complete foot safety.

DISTINGUISHED FEATURES

- Sustains surface heat resistance upto 300°C for one minute.
- Has smart 6 ply contrast red color stitching with bonded thread.
- Aluminum passivated eyelets.
- Flexible anti-puncture Insole protects the foot from sharp objects like nails, etc.
- The use of anti-static thread for stitching on Insock keeps the electro-static charges grounded.
- Also available with metal-free toe cap which fits perfectly without pressure points. This delivers increased wearer comfort while kneeling and banging against obstacles.

IS 15298 (Part-02):2016 EN ISO 20345:2011

Ref. FS 05RO



IDEAL FOR USE

In high temperature zones & hazardous chemical industries. It can be used for adventure, trekking & hiking purpose as well.

DESCRIPTION

Worker's safety shoe providing safety with comfort.

DISTINGUISHED FEATURES

- Sustains surface heat resistance upto 300°C for one minute.
- Has smart 6 ply Black color stitching with bonded thread.
- Aluminum passivated eyelets.
- Flexible Anti-puncture Insole protects the foot from sharp objects like nails, etc.
- The use of anti-static thread for stitching on Insock keeps the electro-static charges grounded.
- Also available with metal-free toe cap which fits perfectly without pressure points. This delivers increased wearer comfort while kneeling and banging against obstacles.

IS 15298 (Part-02):2016 EN ISO 20345:2011

* Actual color may vary with the picture of the shoe



Ref. FS 21RO

IDEAL FOR USE

In high temperature zones & hazardous chemical industries. It can be used for adventure, trekking & hiking purpose as well.

DESCRIPTION

This model is a smart lace-up shoe providing complete protection to the ankle.

DISTINGUISHED FEATURES

- Sustains surface heat resistance upto 300°C for one minute.
- Has smart 6 Ply contrast red color stitching with bonded thread.
- Metallic D-ring and flat laces for better knotting grip.
- Flexible anti-puncture Insole protects the foot from sharp objects like nails, etc.
- The Insock shape cover and supports the arch region of foot for more comfort.
- Has bellow tongue which prevents spillage of water and liquids inside the shoe.
- The use of anti-static thread for stitching on Insock keeps the electro-static charges grounded.
- Also available with metal-free toe cap which fits perfectly without pressure points. This delivers increased wearer comfort while kneeling and banging against obstacles.

IS 15298 (Part-02)

EN ISO 20345:2011

Technical Snapshot			
Ref.	**FS 01RO**	**FS 05RO**	**FS 21RO**
Upper	Buff black grain tango print leather	Buff black grain apollo print leather	Buff black grain apollo print leather
Lining	Soft black netlon lining	Non-woven cambrelle lining	Netlon textile black lining
Vamp Lining	Highly abrasion resistant non woven fabric lining	Highly abrasion resistant non woven fabric lining	Highly abrasion resistant non woven fabric lining
In-sock	5mm Anti fatigue molded EVA/ PU insocks laminated with netlon fabric	5mm Anti fatigue molded EVA/PU insocks laminated with netlon fabric	5mm Anti fatigue molded EVA/PU insocks laminated with netlon fabric
Toe	Steel / Composite	Steel / Composite	Steel / Composite
Sole	PU Nitrile Sole	PU Nitrile Sole	PU Nitrile Sole
Outsole	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats
Certified t	**EN ISO 20345:2011 IS 15298(Part-02)**	**EN ISO 20345:2011 IS 15298(Part-02)**	**EN ISO 20345:2011 IS 15298(Part-02)**
Protection Level	S1, CI, HI, SRC, HRO	S1, CI, HI, SRC, HRO	S1, CI, HI, SRC, HRO
Category	Design A	Design A	Design B
Size	3-13	3-13	3-13

* Actual color may vary with the picture of the shoe



Ref. FS 65RO

IDEAL FOR USE

In high temperature zones & hazardous chemical industries. It can be used for adventure, trekking & hiking purpose as well.

DESCRIPTION

Uniquely designed ankle protection shoe.

DISTINGUISHED FEATURES

- Sustains surface heat resistance upto 300°C for one minute.
- Has smart 6 Ply brown color stitching with bonded thread.
- Equipped with textile loop eyelets.
- Flexible anti-puncture Insole to protect the foot from sharp objects like nails, etc.
- The Insock shape covers and supports the arch region of the foot for more comfort.
- Foam padding in bellow tongue to enhance fit and comfort.
- The use of anti-static thread for stitching on Insock keeps the electro-static charges grounded.
- Also available with metal-free toe cap which fits perfectly without pressure points. This delivers increased wearer comfort while kneeling and banging against obstacles.

IS 15298 (Part-02)

EN ISO 20345:2011

Ref. FS 111RO



IDEAL FOR USE

In high temperature zones & hazardous chemical industries. It can be used for adventure, trekking & hiking purpose as well.

DESCRIPTION

Smart, stylish and fashionable safety shoe equipped with all the features of comfort, robust looks and highest level of safety.

DISTINGUISHED FEATURES

- Sustains surface heat resistance upto 300°C for one minute.
- Has attractive red stitching with bonded thread.
- Metallic D-ring and flat laces for better knotting grip.
- Flexible anti-puncture Insole to protect the foot from sharp objects like nails, etc.
- The Insock shape cover and supports the arch region of foot for more comfort.
- The use of anti-static thread for stitching on Insock keeps the electro-static charges grounded.
- Can also be offered with metal-free toe cap which fits perfectly without pressure points. This delivers increased wearer comfort while kneeling and banging against obstacles.

IS 15298 (Part-02)

EN ISO 20345:2011

* Actual color may vary with the picture of the shoe



Ref. FS 112RO

IDEAL FOR USE

In high temperature zones & hazardous chemical industries. It can be used for adventure, trekking & hiking purpose as well.

DESCRIPTION

Rugged, light weight shoe with durability and a comfortable fit.

DISTINGUISHED FEATURES

- Sustains surface heat resistance upto 300°C for one minute.
- Has smart 6 Ply grey color stitching with bonded thread.
- Aluminum passivated eyelets.
- Flexible anti-puncture Insole to protect the foot from sharp objects like nails, etc.
- The Insock shape cover and supports the arch region of foot for more comfort.
- The use of anti-static thread for stitching on Insock keeps the electro-static charges grounded.
- Can also be offered with metal-free toe cap which fits perfectly without pressure points. This delivers increased wearer comfort while kneeling and banging against obstacles.

IS 15298 (Part-02) EN ISO 20345:2011



Ref. FS 113RO



IDEAL FOR USE

In high temperature zones and hazardous chemical industries. It can be used for adventure, trekking and hiking purpose as well.

DESCRIPTION

Rugged, light weight shoe with durability and a comfortable fit.

DISTINGUISHED FEATURES

- Sustains surface heat resistance upto 300°C for one minute.
- Has smart 6 Ply grey color stitching with bonded thread.
- Aluminum passivated eyelets.
- Flexible anti-puncture Insole to protect the foot from sharp objects like nails, etc.
- The Insock shape cover and supports the arch region of foot for more comfort.
- The use of anti-static thread for stitching on Insock keeps the electro-static charges grounded.
- Can also be offered with metal-free toe cap which fits perfectly without pressure points. This delivers increased wearer comfort while kneeling and banging against obstacles.



IS 15298 (Part-02) EN ISO 20345:2011

* Actual color may vary with the picture of the shoe

Technical Snapshot				
Ref.	**FS 65RO**	**FS 111RO**	**FS 112RO**	**FS 113RO**
Upper	Buff brown crazy horse grain leather	Buff black grain barton print leather and combination with buff black CG grain leather	Buff black grain apollo print leather	Buff black grain apollo print leather
Lining	Breathable spacer orange lining	Breathable spacer grey lining	Breathable spacer grey lining	Soft spacer grey coloured fabric
Vamp Lining	Highly abrasion resistant fabric lining	Non-woven fabric	Non-woven fabric	Non-woven fabric
In-sock	Anti fatigue molded EVA/ PU insocks laminated with black netlon	Anti fatigue molded EVA/PU insocks laminated with black netlon	Anti fatigue molded EVA/ PU insocks laminated with black netlon	Anti fatigue molded EVA/PU insocks laminated with black netlon
Toe	Steel / Composite	Steel / Composite	Steel / Composite	Steel / Composite
Sole	PU Nitrile Sole	PU Nitrile Sole	PU Nitrile Sole	PU Nitrile Sole
Outsole	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats	Cleated outsole with wider cleats
Certified t	**EN ISO 20345:2011 IS 15298(Part-02)**	**EN ISO 20345:2011 IS 15298(Part-02)**	**EN ISO 20345:2011 IS 15298(Part-02)**	**EN ISO 20345:2011 IS 15298(Part-02)**
Protection Level	S1, CI, HI, SRC, HRO	S1, CI, HI, SRC, HRO	S1, CI, HI, SRC, HRO	S1, CI, HI, SRC, HRO
Category	Design B	Design A	Design A	Design A
Size	3-13	3-13	3-13	3-13

NEW

FRONTIER™

Foot Protection



Conforms to:
EN ISO 20345:2011

IS 15298(Part-02)
CM/L-3160441

Ref. FT1203 BL (SWSAPN)

FEATURES

- Comes with excellent grip, comfort and slip resistance
- Has aluminium passivated eyelets
- Consists of 6 ply black color stitching with bonded thread
- Comfortable fabric lining of the shoe makes it sweat and odour free
- Equipped with impact resistant toe cap to protect your feet from heavy impacts

IDEAL FOR USE

- Telecommunication
- Automotive
- Transportation
- Manufacturing
- Pharmaceutical
- Logistics Aviation
- General Industry
- Maintenance


Steel Toe Cap


100% Leather



Anti-Fatigue


Heat Insulation


Antistatic Shoe


Heat Resistance


Oil and Fuel Resistance Sole


Cold Resistance

TECHNICAL DETAILS

Product Code	Upper	Lining	Vamp-lining	Sole	Outsole	In-sock	Category	Size
FT1203 BL (SWSAPN)	Full leather	Soft black netlon Fabric inner lining	Highly abrasion resistant non-woven fabric lining	Single density PU sole	Cleated Outsole with Wider Cleats	5mm Anti-Fatigue EVA plain insocks laminated with Netlon	Design A	3-12

GAS DETECTORS



KARAM's portable gas detector UGS offers unparalleled protection with its single disposable detector design. This design ensures convenience and reliability for users in monitoring gas levels effectively. The detector comes equipped with a replaceable sensor and battery option, allowing for easy maintenance and prolonged usage. This feature enhances the cost-effectiveness and efficiency of the gas detection system, making it a preferred choice for various industrial and safety applications.

This advanced gas detector works diligently, continuously measuring gas levels and displaying real-time concentrations. Its vigilant monitoring capabilities prompt timely responses by raising alarms whenever there is a potential risk, ensuring workers are promptly alerted to any hazardous situation.

Scan here *for a virtual tour of the product*

NEW



PORTABLE SINGLE GAS DETECTORS

IDEAL FOR USE

Oil and Gas, Mining, Chemical Plants, Construction, Agriculture, Firefighting and Wastewater Treatment

DISTINGUISHED FEATURES

- Single device for sensing presence of toxic gases and excessive harmful concentration of other gases in ambient atmosphere.
- Comes with replaceable sensor and battery option
- Provides continuous operation for an impressive two years
- Boasts an exceptional water/dust-proof structure for enhanced durability
- Ensures sensor health with automatic troubleshooting checks
- Equipped with high-performance audible and vibrating alarms for immediate alerts
- Automatically logs upto 30 events for thorough record-keeping
- Effortless configuration and data management through IR Link
- Easy calibration is made possible through the user-friendly Docking Station
- **Weight:** 93 gms

CERTIFIED TO

Ex ia IIC T4 Ga/ IP67 (PESO, ATEX, IECEx)

RANGE OF GAS DETECTORS



Ref. GDU-D-110

Detects low and high levels of Oxygen (O_2) in the air



Ref. GDU-D-210

Detects the presence and concentration levels of Carbon Monoxide (CO) in the air



Ref. GDU-D-310

Detects the presence and concentration levels of Hydrogen Sulphide (H_2S) in the air

ACCESSORIES



IR Link



IR Link Cable



Docking Station

FULL BODY HARNESSES



KARAM offers a comprehensive range of Full Body Harnesses to suit a vast range of applications and situations. Equipped with the finest ergonomics and technically sound features, KARAM Full Body Harnesses are the best choice for comfortable and safe usage for work at height.

Scan here *for a virtual tour of the product*

Some Important Features of a Safety Harness

ATTACHMENT POINTS ON THE HARNESS

The Labels marked as “A” denote the attachment points on the Harness. In certain areas, the labels are marked “A/2” meaning that two similar points held together shall constitute a single attachment point.



MATERIAL OF WEBBING

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

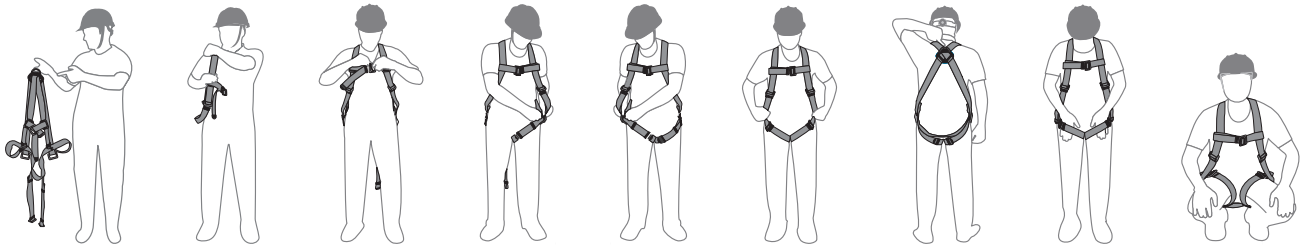


ABOUT FALL INDICATOR

The Fall 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. All KARAM Harnesses are supplied with a Fall Indicator on special request.



HOW TO WEAR A HARNESS







WHAT IS EXTENSION BAND?

This Extension Band allows the user to easily connect to or disengage self from the dorsal attachment D-ring without any external help.

This unique optional Extension Band (made of 30cm length webbing) on the Dorsal Attachment D-ring is provided on request on all models of KARAM Harnesses.

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

TESTED & CERTIFIED

ANSI CE 0598

Ex II 2 G

Testing



DYNAMIC PERFORMANCE TESTING



STATIC LOAD TESTING

REVOLTA SERIES

WHY REVOLTA ?

Working in hazardous industrial situations like the petrochemical industry, paint and oil industry or water treatment plant can prove to be harmful for users wearing harnesses of a normal webbing. This is due to the accumulation of oil, dust, paint or water on the webbing.

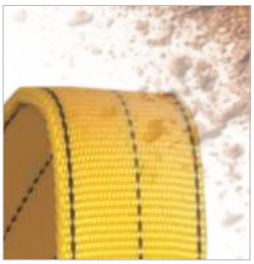
The performance of the webbing deteriorates in this situation because of overexposure. KARAM offers the 'Revolta' range of Harnesses and Lanyards to combat this situation. They are constructed with a special coating that repels oil, dirt and water.

It also allows liquids to bead up and roll off the surface due to changes in surface tension. Coating does not impact the weight, feel, colour and texture of the webbing. Liquid spills can easily be wiped away when blotted with a clean cloth, and dry soil can be brushed off easily.



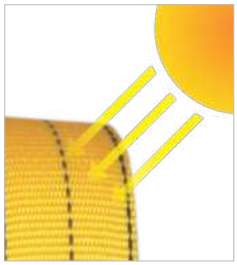
OIL AND DIRT REPELLANT

Webbing is Oil and Dirt repellant that provides resistance from the buildup of oil and dirt.



TEAR AND CUT RESISTANT

Highly Tear and Cut resistant because does not allow abrasion due to collection of dust or dirt.



UV RESISTANT

Highly UV Resistant webbing.



EASY TO MAINTAIN

Can easily be wiped in seconds.

Ideal for use in the following Industries:



Petro Chemical Industry



Paint Industry



Water Treatment plant



Off Shore Areas

REVOLTA HARNESSES

The range is highly corrosion resistant because of Aluminium D-ring and Stainless Steel Buckles.



REVOLTA ALL PURPOSE HARNESS

Ref. PN 56(OR)

Comes with comfortable back and shoulder padding, this Harness can be used for all applications like rope access, rescue, descent, work positioning and fall arrest.

140 kg

EN 361:2002
EN 358:2018
EN 813:2008



REVOLTA POSITIONING HARNESS

Ref. PN 44(OR)

This Harness comes with a sternal fall arrest attachment, and is an ideal choice for work positioning while working at height.

140 kg

EN 361:2002
EN 358:2018



REVOLTA CLIMBERS HARNESS

Ref. PN 24(OR)

Equipped with a front attachment D-ring, this harness can be used for climbing up or down structures, while being attached to a fall arrest Rope Grab in the front.

140 kg

EN 361:2002

Technical Snapshot

Ref.	Attachment Points	Adjustability	Weight	Certified t
PN 56(OR)	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.	Adjustable shoulder, thigh straps and waist belt.Removable X-back pad on shoulder straps.	2.56 kg	EN 361:2002 EN 358:2018 EN 813:2008
PN 44(OR)	One chest attachment D-ring and a Dorsal attachment D-ring for fall arrest. 2 Lateral attachment D-rings for work positioning.	Adjustable shoulder and thigh-straps. Soft padded work positioning belt gives extreme working comfort and safety.	2.24 kg	EN 361:2002 EN 358:2018
PN 24(OR)	One chest attachment D-ring and a Dorsal attachment D-ring for fall arrest.	Adjustable shoulder and thigh-straps.	1.46 kg	EN 361:2002

REVOLTA LANYARDS

KARAM offers repel technology webbing in their range of Lanyards and Pole Strap which provides excellent resistance from build up of oil, dust, dirt and water.



REVOLTA POLE STRAP

Ref. PN 248(OR)

CE

EN 358:2018



REVOLTA EXPANDABLE INTERNAL SHOCK ABSORBING FORKED LANYARD

Ref. PN 371(IS)(A)(OR)

CE

EN 355:2002
VG11 RfU CNB/P/11.063
EN 354:2010



REVOLTA EXPANDABLE INTERNAL SHOCK ABSORBING LANYARD

Ref. PN 399(IS)(A)(OR)

CE

EN 355:2002
EN 354:2010

Technical Snapshot				
Ref.	**Specification**	**Available Length**	**Attachment Elements**	**Certified t**
PN 248(OR)	44mm wide oil repellent webbing incorporated with 50mm tubular webbing for abrasion resistance.	Adjustable from minimum 1.2m to maximum 2.0m	Aluminum Snap Hooks PN 129 at both the ends.	EN 358:2018
PN 371(IS)(A)(OR)	Expandable Forked Fall Arrest Lanyard. Elastic in nature and prevents tripping hazard.	Expanded length: 2.0m Relaxed length: 1.4m to 1.6m	Aluminum Snap Hook PN 129 at one end and Aluminum Rebar Hooks PN 136 at other ends.	EN 355:2002 VG11 RfU CNB/P/11.063 EN 354:2010
PN 399(IS)(A)(OR)	Expandable fall arrest Lanyard. Elastic in nature and prevents tripping hazard.	Expanded length: 2.0m Relaxed length: 1.4m to 1.6m	Aluminum Rebar Hook PN 136 at one end and Aluminum Snap Hook PN 129 at other end.	EN 355:2002 EN 354:2010

NOSPARK SERIES

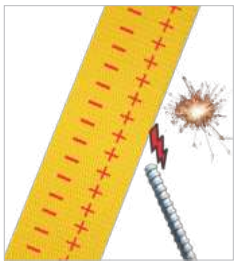
WHY NOSPARK?

A unique challenge while working at height is faced in those areas which have an explosive atmosphere. Besides height, the other big hazard is the presence of volatile compounds in the air.

This air can suddenly burst into flames in the event of the generation of spark.

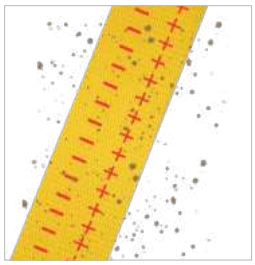
Products made of polymer and plastics are susceptible to create sparking because they tend to accumulate charge on them. Thus all regular Harnesses, made of polyester or similar polymers tend to accumulate charge on them which leads to spark generation.

KARAM 'Nospark' range of Harnesses and Lanyards are specially constructed so as not to collect this charge on them, hence preventing sparks.



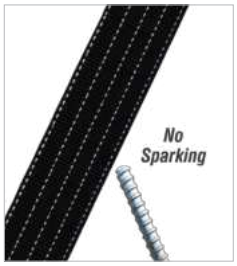
REGULAR WEBBING

Spark results from static charge build up on the Harness and its sudden discharge.



REGULAR WEBBING

Normal webbing attracts dust due to build up of charge.



KARAM SPECIALIZED WEBBING

Nospark webbing of KARAM Harnesses does not allow any charge to build up, hence does not cause any sparking.



KARAM SPECIALIZED WEBBING

The special Anti-Static Nospark range of KARAM Harnesses do not allow dust and micro dirt particles to collect over them since the specialized webbing used does not allow any charge to develop on it.

Ideal for use in the following Industries:



Oil and Gas



Petrochemical Plants



Filling Stations



Mining Industry



Pharmaceutical Industry



Electronic Industry



Medical and Surgical Industry

The Nospark range of KARAM products is **ATEX** certified by **TECHNICKÁ INŠPEKCIA, a.s.**

ATEX certification involves a detailed process of examination, testing and assessment of the equipment intended to be used in potentially hazardous areas, with the end result being the issue of ATEX certificate and report, confirming that the product is safe to use within a potentially explosive atmosphere.

II 2 G
ATEX



The Nospark Harnesses and Lanyards are also CE certified as per relevant EN Norms.

CE

NOSPARK HARNESS

The revolutionary NOSPARK range of Harnesses and Lanyards offered by KARAM are Anti-Static in nature and are ATEX certified. This Harness is specifically designed to offer the perfect solution for safe working at height in a potentially explosive atmosphere.



140 kg

The Antistatic components of this range prevent the risk of an Electrostatic build up and sudden discharge, igniting the explosive atmosphere.

Ref. PN 22(AS)

Ex II 2 G

CE

ATEX 2014/34/EU

EN ISO 80079-36:2016, EN ISO 80079-37:2016
EN 361:2002, Harness webbing also tested for surface resistance as per EN 1149-1:2006 and EN 1149-5:2008

Technical Snapshot				
Ref.	**Attachment Elements**	**Adjustability**	**Weight**	**Certified t**
PN 22(AS)	Two front attachment textile loops for fall arrest	Adjustable shoulder and thigh straps	1.46 kg	EN 361:2002, ATEX 2014/34/EU (EN ISO 80079-36:2016 and EN ISO 80079-37:2016). The Harness webbing also tested for surface resistance as per EN 1149-1:2006 and EN 1149-5:2008

NOSPARK LANYARDS

KARAM offers Nospark single and Forked Fall Arrest Lanyards for safe working at height. In conjunction with Nospark Harness, the usage of these Lanyards completes a safe antistatic fall protection gear during work at height in hazardous conditions.



NOSPARK ANTISTATIC E.A. FORKED LANYARD

Ref. PN 361(AS)

IS 3521(Part 2):2021 | ATEX 2014/34/EU | EN 355:2002 VG 11/RfU Sheet 63



NOSPARK ANTISTATIC E.A. LANYARD

Ref. PN 328(AS)

IS 3521(Part 2):2021 | ATEX 2014/34/EU | EN 355:2002

NEW



NOSPARK ANTISTATIC E.A. FORKED LANYARD

Ref. PN 361(30)(AS)

EN 355:2002 VG 11/RfU Sheet 63

NEW



NOSPARK ANTISTATIC EXPANDABLE E.A. WEBBING FORKED LANYARD

Ref. PN 371(AS)

EN 355:2002 VG11/RfU Sheet 63

Technical Snapshot

Ref.	Material	Available Length	Attachment Elements	Certified t
PN 361(AS)	44mm wide Antistatic webbing.	1.5m 1.8m 2.0m	Aluminium Karabiner PN 117 with Energy Absorber PN 300(AS) at one end and Aluminium Rebar Hook PN 136 at other ends.	EN 355:2002 VG 11/RFU Sheet 63 Atex 2014/34/EU IS 3521(Part 2):2021
PN 361(30)(AS)	30mm wide Antistatic webbing.			EN 355:2002 VG 11/RFU Sheet 63
PN 328(AS)	44mm wide Antistatic webbing.	1.0m 1.5m 1.8m 2.0m		EN 355:2002 Atex 2014/34/EU IS 3521(Part 2):2021
PN 371(AS)		Relaxed Length: 1.4m-1.6m Expanded Length: 2.0m		EN 355:2002 VG 11/RFU Sheet 63

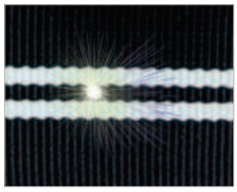
FLANIL SERIES

WHY FLANIL ?

Working in the Industries like Power, Heat-Furnace and Heavy Engineering poses a risk of exposure to flame sparks generation due to welding. This damages a Harness made up of regular webbing, thereby compromising its strength.

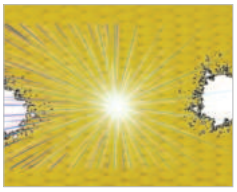
The Flanil range of Harnesses and Lanyards by KARAM has been specially designed for these workers who are engaged in welding and hot working conditions at height.

Webbing of the Flanil Harness and lanyard is made of a special fibre which is tested as per EN ISO 15025:2015 for limited flame spread and as per ISO 1950:1988 for Impact of Splashes of molten metal.



KARAM FLANIL WEBBING

KARAM 'FLANIL' webbing withstands exposure to welding sparks and maintains its strength.



REGULAR WEBBING

Normal webbing gets damaged and weak on exposure to welding sparks.

Ideal for use in the following Industries:



Heat Furnace



Heavy Engineering



Power Industry



Welding Operations

Webbing of the Flanil Harness and lanyard is made of a special fibre which is tested as per EN ISO 15025:2015 for limited flame spread and as per ISO 1950:1988 for Impact of Splashes of molten metal.

FLANIL HARNESSES



FLANIL FLAME RESISTANT FULL BODY HARNESS

Ref. PN 22(FR)

140 kg

EN 361:2002



FLANIL FLAME RESISTANT FULL BODY HARNESS

Ref. PN 42(02)(FR)

**Comes with Work Positioning Belt PN 02*

140 kg

EN 358:2018
EN 361:2002

Technical Snapshot				
Ref.	**Attachment Elements**	**Adjustability**	**Weight**	**Certified t**
PN 22(FR)	Two front attachment textile loops in addition to the Dorsal D-ring for fall arrest.	Adjustable chest, shoulder and thigh straps.	1.52 kg	EN 361: 2002 The Webbing is also tested in accordance with EN ISO 15025:2002 and assessed in accordance with EN ISO 9150:1988
PN 42(02)(FR)	Two front attachment textile loops in addition to the Dorsal D-ring for fall arrest. 2 Lateral D-rings at waist level on the sides for work positioning. Soft padding on waist belt, which comes with special flame resistant cover for extended comfort. Ideally positioned Sit-Strap for long lasting comfort.		2.48 kg	EN 358:2018 EN 361:2002 The Webbing is also tested in accordance with EN ISO 15025:2002 and assessed in accordance with EN ISO 9150:1988

FLANIL LANYARDS

KARAM also offers Flame Resistant Lanyards that are compatible with Flanil Flame Resistant Full Body Harnesses to ensure complete protection to the workers engaged in welding and during hot working conditions at height.



FLANIL FLAME RESISTANT E.A. FORKED EXPANDABLE FALL ARREST LANYARD

Ref. PN 371(FR)

IS 3521(Part 2):2021

EN 355:2002
VG 11/RfV Sheet 63
EN ISO 9150:1988
EN ISO 15025:2002



FLANIL FLAME RESISTANT WORK POSITIONING LANYARD WITH RING TYPE ADJUSTER

Ref. PN 243(FR)

EN 358:2018
EN ISO 9150:1988
EN ISO 15025:2002



FLANIL FLAME RESISTANT RESTRAINT FORKED LANYARD

Ref. PN 261(FR)

EN 354:2002
EN ISO 15025:2002
EN ISO 9150:1988



FLANIL FLAME RESISTANT E.A. FALL ARREST LANYARD

Ref. PN 328(FR)

IS 3521(Part 2):2021

EN 355:2002
EN ISO 15025:2002
EN ISO 9150:1988



FLANIL FLAME RESISTANT E.A. FALL ARREST FORKED LANYARD

Ref. PN 361(FR)

IS 3521(Part 2):2021

EN 355:2002
VG 11/RfU Sheet 63
EN ISO 15025:2002
EN ISO 9150:1988

Technical Snapshot				
Ref.	**Specification**	**Available Length**	**Attachment Elements**	**Certified t**
PN 371(FR)	44mm wide flame resistant webbing. Energy Absorber in 44mm wide webbing which limits the impact of the fall to less than 6kN. Covered by a special flame resistant pouch.	Expandable length: 2.0m Relaxed length: 1.4m to 1.6m	Incorporated with Energy Absorber PN 300 (FR) with one side Karabiner PN 112 and two Steel Scaffold Hooks PN 131N at other ends.	EN 355:2002 VG 11/RfU Sheet 63 EN ISO 9150:1988 EN ISO 15025:2002 IS 3521(Part 2):2021
PN 243(FR)	33mm wide flame resistant webbing. Forged alloy steel ring-adjuster.	2.0m	Provided with Karabiner PN 112 at both ends for attachment.	EN 358:2018 EN ISO 9150:1988 EN ISO 15025:2002
PN 261(FR)	44mm wide flame resistant webbing.	1.5m 1.8m 2.0m	Consists of Karabiner PN 112 at one end and Steel Scaffold Hook PN 131N at other ends.	EN 354:2002 ISO 9150:1988 EN ISO 15025:2002
PN 328(FR)	44mm wide flame resistant webbing. Energy Absorber in 44mm wide webbing which limits the impact of the fall to less than 6kN. Covered by a special flame resistant tubular pouch.	1.0m 1.5m 1.8m 2.0m	Consists of Karabiner PN 112 with Energy Absorber PN 300 (FR) at one end and one Steel Scaffold Hook PN 131N at other end.	EN 355:2002 EN ISO 9150:1988 EN ISO 15025:2002 IS 3521(Part 2):2021
PN 361(FR)	44mm wide flame resistant webbing. Energy Absorber in 44mm wide webbing which limits the impact of fall to less than 6kN. Covered by a special flame resistant tubular pouch.	1.5m 1.8m 2.0m	Consists of Karabiner PN 112 with Energy Absorber PN 300 (FR) at one end and two Steel Scaffold Hook PN 131N at the other.	EN 355:2002 VG 11/RfU Sheet 63 EN ISO 9150:1988 EN ISO 15025:2002 IS 3521(Part 2):2021

FLANIL CROSS ARM ANCHOR STRAP

Coupled with Flame Resistant Harness and Lanyard, this Flame Resistant Cross Arm Anchor Strap provides suitable anchorage, completing the entire Flame Resistant Fall Arrest system for a worker.



FLANIL FLAME RESISTANT CROSS ARM ANCHOR STRAP

Ref. PN 804(FR)

CE

EN 795:2012 Type B
EN ISO 15025:2002
EN ISO 9150:1988

Technical Snapshot					
Ref.	**Specification**	**Available Length**	**Attachment Elements**	**Strength**	**Certified t**
PN 804(FR)	44 mm wide Flame Resistant Webbing.	1.0m 1.5m 2.0m	Equipped with forged steel D-rings at both the ends.	Min. 18 kN	EN 795:2012 Type B EN ISO 9150:1988 EN ISO 15025:2002

DIENOC SERIES

WHY DIENOC ?

There is a challenge of being exposed to free-flowing current while working in Industries like Tower erection, Mining, Transmission or Petroleum.

KARAM offers the Dienoc range of Harnesses having DIELECTRIC D-ring, Buckles and Frames. These are specially designed for workers working in conditions where there are possible electrical hazards.

The special Plastic Coating on all the metal fittings makes the Dienoc Range electrically insulated. The maximum permissible Dielectric Resistance of the Dienoc Range is 12kV.



NORMAL BUCKLE



DIELECTRIC BUCKLE

Ideal for use in following Industries:



Tower Erection



Mining Industry



Transmission Industry



Petroleum Industry

DIENOC HARNESSES



DIENOC DIELECTRIC NON-CONDUCTIVE HARNESS

Ref. PN 22(DE)

140 kg

EN 361:2002



DIENOC DIELECTRIC NON-CONDUCTIVE HARNESS WITH WORK POSITIONING BELT

Ref. PN 42(01)(DE)

**Comes with Work Positioning Belt PN 01*

140 kg

EN 361:2002
EN 358:2018

Technical Snapshot				
Ref.	**Attachment Points**	**Convenience**	**Weight**	**Certified t**
PN 22(DE)	Two chest attachment textile loops and a non-conductive Dorsal attachment D-ring for fall arrest.	Shoulder straps are elasticated to provide flexibility and snug fitting to the user. Use of special plastic coated D-rings and all metal adjustment buckles make it completely electrically insulated. The Buckles are specially designed for slippage resistance.	1.68 kg	EN 361:2002
PN 42(01)(DE)	Two chest attachment textile loops and a non-conductive Dorsal attachment D-ring for fall arrest. Two non-conductive Lateral D-rings at waist level for work positioning.		2.36 kg	EN 361:2002 EN 358:2018

DIENOC LANYARDS

KARAM introduces Dielectric Lanyards equipped with Dielectric Hooks for use in the transmission industry, offering full protection against electrical hazards.



DIENOC E.A. LANYARD

Ref. PN 326(30)(DE)

IS 3521(Part 2):2021 EN 355:2002



DIENOC E.A. FORKED LANYARD

Ref. PN 360(30)(DE)

IS 3521(Part 2):2021 EN 355:2002
VG11/RfU Sheet 63



DIENOC E.A. LANYARD

Ref. PN 329(30)(DE)

IS 3521(Part 2):2021 EN 355:2002



DIENOC E.A. FORKED LANYARD

Ref. PN 361(30)(DE)

IS 3521(Part 2):2021 EN 355:2002
VG11/RfU Sheet 63

Technical Snapshot

Ref.	Specification	Available Length	Attachment Elements	Certified t
PN 326(30)(DE)	Made of 30mm wide polyester webbing. Energy Absorber PN 300 in 44mm wide webbing which limits the impact of fall to less than 6kN.	1.0m 1.5m 1.8m 2.0m	Dielectric Hook PN 166 at anchorage end.	EN 355:2002 IS 3521(Part 2):2021
PN 360(30)(DE)		1.5m 1.8m 2.0m	Two Dielectric Hooks PN 166 at anchorage ends.	EN 355:2002 VG11/RfU Sheet 63 IS 3521(Part 2):2021
PN 329(30)(DE)		1.0m 1.5m 1.8m 2.0m	Dielectric Hook PN 166 at anchorage end and Dielectric Snap Hook PN 172 at attachment end.	EN 355:2002 IS 3521(Part 2):2021
PN 361(30)(DE)		1.5m 1.8m 2.0m	Two Dielectric Hooks PN 166 at anchorage ends and Dielectric Snap Hook PN 172 at attachment end.	EN 355:2002 VG11/RfU Sheet 63 IS 3521(Part 2):2021

VEST HARNESSES

Equipped with multiple pockets, KARAM Vest Harnesses are specially designed into mesh net vests for tangle-free body wear.



Ref. PN 20



Ref. PN 20(RO)
(Reflective Orange)



Ref. PN 20(RG)
(Reflective Green)

140 kg

CE EN 361:2002

CE EN 361:2002

CE EN 361:2002

Technical Snapshot									
Ref.	Material	Application	Attachment Points				Weight	Adjustability	Certified t
			Dorsal	Sternal	Lateral	Ventral			
PN 20	Polyester	FA	✓	✓			1.66 kg	Adjustable chest, shoulder and thigh straps.	EN 361:2002
PN 20(RO)		FA	✓	✓			1.82 kg		
PN 20(RG)		FA	✓	✓			1.80 kg		

FA - Fall Arrest

ELASTO SERIES

KARAM Elasto Range constitutes special stretchable Harnesses designed for total comfort to the wearer. The elastic webbing used in these Harnesses provides for greater freedom of movement. It allows the wearer to twist and flex freely during long hours of work. The metal components in this range are made up of stainless steel for excellent corrosion resistance. These Harnesses are best suited for all body size and shape.

ELASTO HARNESSES



Ref. PN 74

140 kg

EN 361:2002



Ref. PN 94

140 kg

EN 361:2002
EN 358:2018

Technical Snapshot						
Ref.	**Material**	**Attachment Points**	**Adjustability**	**Convenience**	**Weight**	**Certified t**
PN 74	Polyester	A sternal attachment D-Ring and a Dorsal attachment D-ring for fall arrest.	Adjustable shoulder and thigh straps.	Metal components made up of Stainless Steel for excellent corrosion protection.	1.26 kg	EN 361:2002
PN 94	Polyester	A sternal attachment D-Ring and a Dorsal attachment D-ring for fall arrest and 2 Lateral D-Rings for work positioning.			1.96 kg	EN 361:2002 EN 358:2018

KARAM is proud to keep pace with the demand for constant innovation in product towards providing customer delight. We are pleased to announce the unveiling of Magna, Rhino, E-Con and KI Series of Harnesses coupled with the features like never before.

THE NEW, IMPROVISED, ABRASION RESISTANT WEBBING

One of the major problems observed in the webbing of the Harness is that it gets abraded when used multiple times. The abrasion occurs due to excessive wear and tear of the Harness.

With over twenty years of constant innovation and research, KARAM understanding the needs of the customer, has come up with an ideal solution to the above problem.

KARAM is one of the first companies in India to introduce this pioneering technology of a superior ABRASION resistant webbing in the Harness. Our webbing conforms to the stringent American standard ANSI Z 359.11.2014.

This special property enhances the life of the Harness in the long term, which is most benefitting to the user.



Abrasion Resistance



Scan here to watch the abrasion resistant test on KARAM Harness Webbing

A HARNESS EMBRACING THE NEW AGE TECHNOLOGY

KARAM Magna range of Harnesses come with RFID Tag which is also an important tool used to combat the problem of the sale of fake KARAM products. It identifies the Harness as a genuine KARAM product and tracks the authenticity to its roots. This tag when scanned from an Android or iOS phone, takes you directly to the KARAM app.

KARAM application is India's first mobile application for safety equipment asset management. It reminds the user of pending inspection and provides access to information related to the Harness- its batch number, technical documents, correct areas of use, and much more. In short, KARAM App provides a one-stop safety solution in creating awareness for the use of PPE.

MAGNA

Magna is the premium range of KARAM Harnesses and comes with the highest features of ergonomics, comfort, safety, quick-connect automatic buckles, and tangle-free design.

Salient Features!

Unique Label Protector

Magna series of Harnesses are equipped a unique Label Protector with velcro cover for holding Harness labels and identification tag securely.

Locking Indicator On Automatic Buckles

Extremely easy to use with single hand adjustment, the Automatic Buckles come with Locking Indicator which is seen when the buckle lock is fully engaged.

Bend Aluminium D-Rings

Lightweight forged aluminum D-Rings, specially designed with 'BEND' to stand out, enabling easy accessability to the user doing positioning at all times.

Metal Fittings Capable Of Taking The Salt Spray Test Of More Than 500 Hours

Metal Fittings with CED coatings are capable of taking salt spray test of more than 500 hours.

Elasticated Loops

Specially designed to retain the excess strap while adjustment.

Adjustment Buckles

All adjustment buckles provided with a unique "Pull Grip", making it easy to pull down with the thumb and adjust all straps easily for a good fit.



Scan here *for a virtual tour of the product*

Comfortable And Breathable Padding

Now work for longer hours..without any fatigue! The padding is uniquely designed to allow the air to flow inside the padding for a sweat-free feel. The ergonomic design reduces irritation caused due to sweat, improves airflow and reduces heat and moisture entrapment.

The All-New Registerd Design Of Webbing

The beautiful combination of grey and red stripes enhances the look of the Harness and provides you the most classy and stylish appearance while at work.

Heavy Duty Webbing

The Harness uses a heavy-duty webbing that is almost twice as strong as the standards require, and is certain to provide the longest service life possible.

Re-Engineered Registered Stitching Pattern

Automatic, computerized stitching pattern on the Harnesses to ensure the accurate number of stitches per inch. This ensures consistency of breaking strength of each stitched point.

CED Coating On All Metal Fittings For Best Corrosion Resistance

The coating on all metal parts changes from Galvanized to CED coating to provide the highest degree of corrosion protection packed with high aesthetic appeal.

New MAGNA Logo

Unveiling the New Magna Logo for adding an enhanced style.

MAGNA



MAGNA 1

Magna 1 Harness has a Dorsal attachment D-Ring, and two front attachment textile loops for fall arrest. It is equipped with fully padded and adjustable shoulder straps with ergonomically designed padding for reducing irritation caused due to sweat, improving airflow and reducing heat and moisture entrapment.

140 kg

CE

EN 361:2002



MAGNA 2

Magna 2 Harness is one of the most extensively used Harnesses of KARAM, particularly for tower and ladder climbing. The sternal attachment textile loops can be attached to a Rope Grab to allow safe anchorage while climbing. The two lateral D-rings on this Harness provide attachment for Work-Positioning Lanyards, enabling safe and comfortable positioning at height. The padded work positioning belt is provided with a bigger handle at the back for attaching an extra Karabiner or a Connector.

140 kg

CE

EN 361:2002
EN 358:2018



MAGNA 3

Equipped with the all features of adjustability and ergonomics, KARAM Magna 3 is an ideal Harness for fall arrest and Work Positioning while working at height for long hours. However, it is the Ventral and Sternal attachment D-rings on this Harness that make it the right choice for use in rescue, rope access, tower climbing and window cleaning. The X-shaped construction wraps to reduce pressure points during prolonged suspension.

140 kg

CE

EN 361:2002
EN 358:2018
EN 813:2008

Technical Snapshot									
Ref.	Material	Application	Attachment Points				Weight	Adjustability	Certified t
			Dorsal	Sternal	Lateral	Ventral			
Magna 1	Polyester	FA	✓	✓			1.75 kg	Adjustable shoulder, chest strap and thigh straps.	EN 361:2002
Magna 2		FA + WP	✓	✓	✓		2.33 kg	Adjustable shoulder, chest strap and thigh straps.	EN 361:2002 EN 358:2018
Magna 3		FA + WP + RA	✓	✓	✓	✓	2.31 kg	Adjustable shoulder, thigh straps and waist belt.	EN 361:2002 EN 358:2018 EN 813:2008

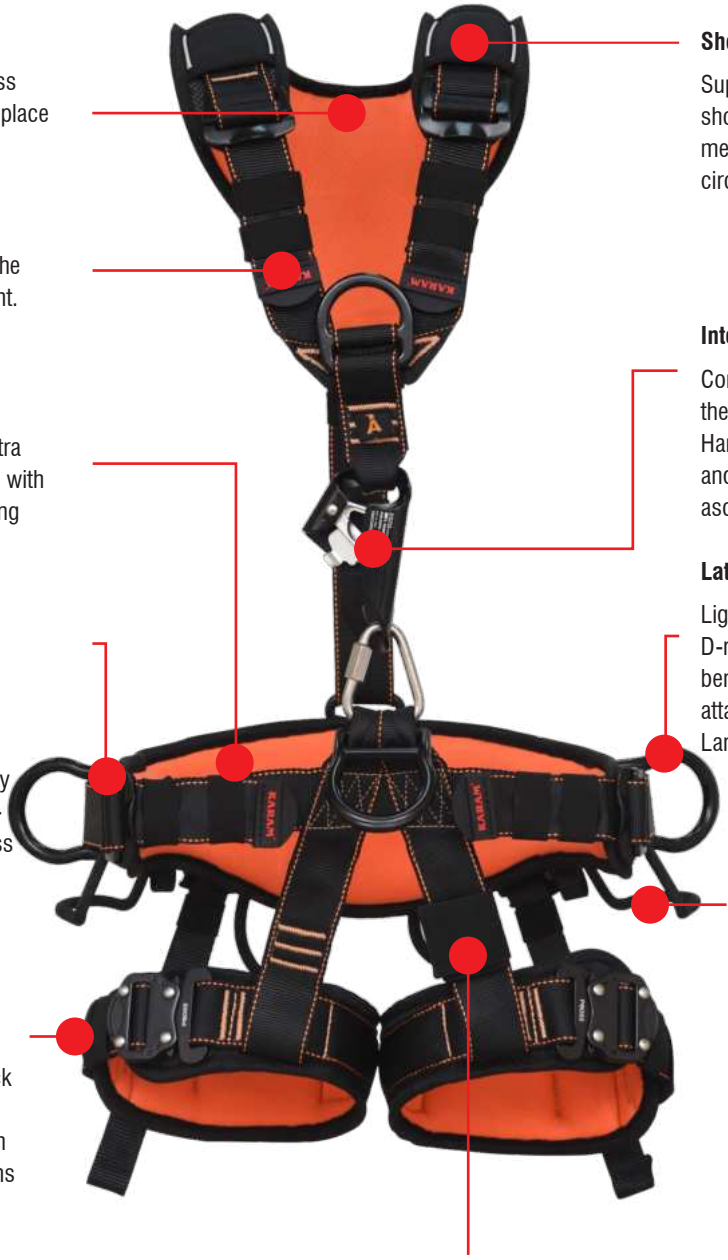
FA - Fall Arrest / WP - Work Positioning / R - Rescue / RA - Rope Access

ROPE ACCESS AND RESCUE HARNESSES RANGE

Introducing KARAM's specialized Harness range for Rope Access and Rescue applications. This latest range of premium Harnesses are meticulously designed and engineered for optimal performance in rope access and rescue operations. These Harnesses boast a perfect blend of ergonomic design, comfort, and top-notch safety features. All the metal fittings in the range are made up of light weight Aluminium and are anodized to provide the highest degree of corrosion protection packed with high aesthetic appeal.

Salient Features!

NEW



ID Plate:

Dorsal Webbing Holding Cross Plate maintains the D-ring in place even after a fall.

Elastic Loops:

Specially designed to retain the excess strap while adjustment.

Work Positioning Belt:

With knitted mesh pad for extra comfort. The belt is provided with tool holding loops for attaching tool bags etc.

Combination Buckles:

With a unique pull-up grip, these buckles are very easy to use and can be tightened/ loosened with one hand. They provide very comfortable adjustment, keeping the Harness snug fit to the body.

Thigh Straps:

The distinctively placed fully padded straps with Quick Release buckles allow easy adjustment. The knitted mesh net used in the pads maintains proper air circulation.

Metal Fittings with CED coating:

CED coated metal fittings are capable of taking salt spray test of more than 500 hours.

Shoulder Straps:

Superior comfort with fully padded shoulder straps, featuring knitted mesh pads that promote excellent air circulation during extended wear.

Integrated Croll Ventral Rope Clamp:

Comes permanently attached with the ventral attachment point of the Harness allowing the greater efficiency and freedom of movement during rope ascent.

Lateral D-Rings:

Light Weight forged Aluminium D-rings, specially designed with a bend to stand out, enabling easy attachment to the Work Positioning Lanyard.

Handles at the back:

Bigger handles at the back for carrying extra Karabiners, tools, bolt bags etc.

Label Protector:

Equipped with Label protector with velcro cover for holding Harness labels and identification tag securely.

CE

EN 361:2002
EN 358:2018
EN 813:2008



Ref. PN 62

Equipped with all the features of adjustability and ergonomics, KARAM Rescue Harness PN 62 comes with an integrated CROLL ventral rope clamp on the ventral attachment point for greater efficiency and freedom of movement in rope ascent. Its ergonomically designed padding on waist belt, shoulder and thigh straps reduces the irritation caused due to sweat, improves airflow and reduces heat and moisture entrapment.

140 kg

CE

EN 361:2002
EN 358:2018
EN 813:2008



Ref. PN 61

KARAM Rescue Harness PN 61 comes with Dorsal and Sternal attachment D-Ring for fall arrest. The two Lateral D-rings on this Harness provide attachment for Work-Positioning Lanyards, enabling safe and comfortable positioning at height. However, the Ventral attachment D-ring at waist level on this Harness also make it the right choice for use in rescue and rope access application. The X-shaped construction helps to reduce pressure points during prolonged suspension.

140 kg

CE

EN 361:2002
EN 358:2018
EN 813:2008



Ref. PN 61(R)

With all the adjustability and convenience features of PN 61, this Harness is a comfortable and multi purpose Harness. The D-ring at the back of the waist pad makes this Harness ideal for use in restraint purpose too. The light weight and knitted mesh pads on shoulder leg straps and waist belt maintain proper air circulation keeping the user comfortable throughout the work.

140 kg

CE

EN 361:2002
EN 358:2018
EN 813:2008

Technical Snapshot									
Ref.	Material	Application	Attachment Points				Weight	Adjustability	Certified t
			Dorsal	Sternal	Lateral	Ventral			
PN 61	Polyester	FA+WP +RA+R	✓	✓	✓	✓	2.1 kg	Adjustable shoulder, thigh straps and waist belt.	EN 361:2002 EN 358:2018 EN 813:2008
PN 62		FA+WP +RA+R	✓	✓	✓	✓	2.35 kg	Adjustable shoulder, thigh straps and waist belt.	
PN 61(R)		FA+WP +RA+R +RE	✓	✓	✓	✓	2.64 kg	Adjustable shoulder, thigh straps and waist belt.	

FA - Fall Arrest / WP - Work Positioning / R - Rescue / RA - Rope Access / RE - Rear

RHINO SERIES

Equipped with 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.

Salient Features!



Scan here *for a virtual tour of the product*

CED Coating On All Metal Fittings For Best Corrosion Resistance

The coating on all metal parts changed from Galvanized to CED coating to provide the highest degree of corrosion protection packed with high aesthetic appeal.

Metal Fittings Capable Of Taking the Salt Spray Test Of More Than 500 Hours

Metal Fittings with CED coatings are capable of taking salt spray test of more than 500 hours.

Retro-Reflective Thread

2 stripes of webbing thread are retro-reflective. Designed to keep you safe by allowing the user to be visible when light is thrown at him.

Improvised Registered Webbing Design

The new webbing maintains comfort at all times without compromising on mobility.

Unique Aesthetic Registered Stitching Pattern

For enhanced stitching strength, durability and a smart design.

Bigger Dia Lateral D-Rings

Has Lateral D-rings with much bigger dia on Work Positioning Belt to enable easy attachment of Work Positioning Lanyard. Also enables snag-free connection to bigger size Hooks.

Unique Label Protector

Rhino series of Harnesses are now equipped with a unique Label Protector with velcro cover for holding Harness labels and identification tag securely.

Ergonomic And Durable ID Plate

Rhino Series of Harnesses are now more durable and sturdy with robust ID plates having an increased life.

Heavy Duty Webbing

The Harness has a heavy-duty webbing that is almost twice as strong as the standards require, and are certain to provide the longest service life possible.

CE

EN 361:2002
EN 358:2018
EN 813:2008



Ref. PN 57

PN 57 is a Tower Harness having a fully padded and adjustable work positioning belt with a knitted mesh pad to provide an extreme level of support to the back while working at height. The Karabiner at the front of the harness enables the wearer to easily wear or remove the Harness by simply attaching/detaching it.

Also available with extension band - Ref. PN 57(E)

140 kg

CE

EN 361:2002
EN 358:2018
EN 813:2008



Ref. PN 56

PN 56 is a comfortable Harness and very versatile in use. It is the most popular Harness used to carry out the rescue of a fall victim, by descent. Consisting of adjustment buckles with a unique “Pull Grip”, the straps of the harness can easily be adjusted for a good fit.

Also available with extension band - Ref. PN 56(E)

140 kg

CE

EN 361:2002
EN 358:2018
EN 813:2008

Technical Snapshot									
Ref.	**Material**	**Application**	**Attachment Points**				**Weight**	**Adjustability**	**Certified t**
			Dorsal	**Sternal**	**Lateral**	**Ventral**			
PN 57	Polyester	FA+WP+ RA	✓		✓	✓	2.31 kg	Adjustable shoulder and thigh straps.	EN 361:2002 EN 358:2018 EN 813:2008
PN 56		FA+WP +RA+R	✓	✓	✓	✓	2.38 kg	Adjustable shoulder, and thigh straps.	

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



Ref. PN 51 (Sit Harness)

KARAM Sit Harness PN 51 is ideal for work positioning and restraint. It is a Sit Harness, and is not a Harness for fall protection. Best suited Harness for use in Work Positioning and Restraint.

EN 358:2018
EN 813:2008



Ref. PN 45(01)
PN 45(02)
PN 45(03)

The suspension strap incorporated on the shoulder strap of the Harness PN 45 has a D-ring which can be used to connect to the rescue equipment, when in need. It is not to be used for suspension but for retrieval. When not in use, the suspension strap lies attached to the shoulder strap with the velcro binding.

140 kg

EN 361:2002
EN 358:2018
EN 1497:2007



Ref. PN 44(01)
PN 44(02)
PN 44(03)

PN 44 is an ideal Harness equipped with one chest attachment D-ring and Dorsal D-ring for fall arrest. It also has two Lateral D-rings for work positioning. Is best suited for tower climbing and work positioning at height.

Also available with extension band - Ref. PN 44(01)(E), PN 44(02)(E), PN 44(03)(E)

140 kg

EN 361:2002
EN 358:2018

Technical Snapshot

Ref.	Material	Application	Attachment Points				Rescue Strap	Weight	Adjustability	Certified t
			Dorsal	Sternal	Lateral	Ventral				
PN 51	Polyester	WP+RA			✓	✓	NA	1.54 kg	Adjustable thigh straps and waist belt.	EN 358:2018 EN 813:2008
PN 45	Polyester	FA+WP +R	✓	✓	✓		Yes	2.37 kg	Adjustable shoulder, chest straps, thigh straps and waist belt.	EN 361:2002 EN 358:2018 EN 1497:2007
PN 44		FA+WP	✓	✓	✓		NA	2.20 kg		EN 361:2002 EN 358:2018

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



Ref. PN 43(01)
PN 43(02)
PN 43(03)

Equipped with 2 chest attachment D-rings and all the adjustability features, PN 43 is the ideal Harness for tower climbing, work positioning and working on a mast.

Also available with extension band - Ref. PN 43(01)(E), PN 43(02)(E), PN 43(03)(E)

IS 3521(Part 1):2021 EN 361:2002 EN 358:2018



Ref. PN 42(01)
PN 42(02)
PN 42(03)

Comprising Chest Attachment textile loops, this Harness is the best Harness for tower climbing and work positioning at height.

Also available with extension band - Ref. PN 42(01)(E), PN 42(02)(E), PN 42(03)(E)

IS 3521(Part 1):2021 EN 361:2002 EN 358:2018



Ref. PN 41(01)
PN 41(02)
PN 41(03)

With all the adjustability features, KARAM PN 41 is a specialized Harness for fall arrest and work positioning at height in industries like chemicals and fertilizers.

Also available with extension band - Ref. PN 41(01)(E), PN 41(02)(E), PN 41(03)(E)

IS 3521(Part 1):2021 EN 361:2002 EN 358:2018

Technical Snapshot

Ref.	Material	Application	Attachment Points				Weight	Adjustability	Certified t
			Dorsal	Sternal	Lateral	Ventral			
PN 43	Polyester	FA+WP	✓	✓	✓		2.31 kg	Adjustable shoulder, chest strap, thigh straps and waist belt.	EN 361:2002 EN 358:2018 IS 3521(Part 1):2021
PN 42		FA+WP	✓	✓	✓		2.04 kg		EN 361:2002 EN 358:2018 IS 3521(Part 1):2021
PN 41		FA+WP	✓		✓		2.07 kg		EN 361:2002 EN 358:2018 IS 3521(Part 1):2021

FA - Fall Arrest / WP - Work Positioning



Ref. PN 32(01)
PN 32(02)
PN 32(03)

Has 2 Chest attachment textile loops, adjustable waist and thigh straps with 2 lateral D-ring for work positioning.

Also available with extension band - Ref. PN 32(01)(E), PN 32(02)(E), PN 32(03)(E)

IS 3521(Part 1):2021 EN 361:2002
EN 358:2018



Ref. PN 31(01)
PN 31(02)
PN 31(03)

Adjustable waist and thigh straps with 2 lateral D-ring for work positioning.

Also available with extension band - Ref. PN 31(01)(E), PN 31(02)(E), PN 31(03)(E)

IS 3521(Part 1):2021 EN 361:2002
EN 358:2018



Ref. PN 25

The Extension Rescue Strap incorporated on the shoulder strap of the Harness has a D-ring that 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. When not in use, the Extension Rescue Strap lies attached to the shoulder strap with the help of Velcro binding.

EN 361:2002
EN 1497:2007

Technical Snapshot

Ref.	Material	Application	Attachment Points					Weight	Adjustability	Certified t
			Dorsal	Sternal	Lateral	Ventral	Rescue Strap			
PN 32	Polyester	FA+WP	✓	✓	✓			1.67 kg	Adjustable chest strap, thigh straps and waist belt.	EN 361:2002 EN 358:2018 IS 3521(Part 1):2021
PN 31		FA+WP	✓		✓			1.61 kg	Adjustable chest strap, thigh straps and waist belt.	EN 361:2002 EN 358:2018 IS 3521(Part 1):2021
PN 25		FA+R	✓	✓			✓	1.58 kg	Adjustable chest, shoulder strap and thigh straps.	EN 361:2002 EN 1497:2007

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



Ref. PN 24

Consists of 1 chest attachment D-ring with adjustable shoulder and thigh straps. Is best suited for Fall arrest application.

Also available with extension band - Ref. PN 24(E)

EN 361:2002



Ref. PN 23

Has two chest attachment D-rings, adjustable shoulders and thigh strap with ideally positioned sit strap for extended comfort.

Also available with extension band - Ref. PN 23(E)

IS 3521(Part 1):2021 EN 361:2002



Ref. PN 22

Has two chest attachment textile loops with adjustable shoulder, chest strap and thigh strap.

Also available with extension band - Ref. PN 22(E)

IS 3521(Part 1):2021 EN 361:2002

Technical Snapshot									
Ref.	**Material**	**Application**	**Attachment Points**				**Weight**	**Adjustability**	**Certified t**
			Dorsal	**Sternal**	**Lateral**	**Ventral**			
PN 24	Polyester	FA	✓	✓			1.38 kg	Adjustable shoulder, chest and thigh straps.	EN 361:2002
PN 23		FA	✓	✓			1.50 kg		EN 361:2002 IS 3521(Part 1):2021
PN 22		FA	✓	✓			1.30 kg		EN 361:2002 IS 3521(Part 1):2021

FA - Fall Arrest



Ref. PN 21

Has adjustable chest and thigh straps with ideally positioned sit strap for extended comfort.

Also available with extension band - Ref. PN 21(E)

IS 3521(Part 1):2021 EN 361:2002



Ref. PN 12

PN 12 is a basic CE compliant Harness, having adjustable chest and thigh straps. In addition to the Dorsal D-ring, this Harness is also provided with 2 front attachments textile loops for fall arrest.

Also available with extension band - Ref. PN 12 (E)

IS 3521(Part 1):2021 EN 361:2002



Ref. PN 11

PN 11 is a basic CE compliant Harness, having adjustable chest and thigh straps, with a Dorsal D-ring for fall arrest.

Also available with extension band - Ref. PN 11 (E)

IS 3521(Part 1):2021 EN 361:2002

Technical Snapshot

Ref.	Material	Application	Attachment Points				Weight	Adjustability	Certified t
			Dorsal	Sternal	Lateral	Ventral			
PN 21	Polyester	FA	✓				1.28 kg	Adjustable chest, shoulder and thigh straps.	EN 361:2002 IS 3521(Part 1):2021
PN 12		FA	✓	✓			1.10 kg	Adjustable chest and thigh straps.	
PN 11		FA	✓				1.05 kg		

FA - Fall Arrest

E-CON SERIES

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 provides an easy solution to most fall hazard situations.

Salient Features!



Scan here *for a virtual tour of the product*

Now Comes with Fall Indicator

The Indicator is a small label stitched to the backside of the shoulder strap that flies out of the Harness in the event of a fall. All KARAM ECON series of Harnesses come with this indicator.

Newly Designed Buckles

All Buckles in this range now come with better-rounded contours to ensure better locking and lesser chances of accidental opening.

Uniquely Registered Designed Webbing

For adding Style with Safety-KARAM E-CON Series of Harnesses comes in a conspicuous combination of Red and Black with a unique design of webbing for becoming an ideal choice for the user.

Re-engineered Registered Stitching Pattern

Automatic, computerized stitching pattern on the Harnesses to ensure the accurate number of stitches per inch. This ensures consistency of breaking strength of each stitched point.

Heavy-Duty Webbing

The Harness is made of heavy-duty webbing that is almost twice as strong as the standards require, and is certain to provide the longest service life possible.

Enhanced Sit Strap Design

The E-CON range of Harnesses comes with a new design of sit strap to increase its durability.

E-CON HARNESSES



FULL BODY HARNESS FOR CONTROLLED DESCENT (CLASS D)

Ref. PN 14

Harness best suited for a controlled descent in confined spaces.

IS 3521(Part 1):2021



FULL BODY HARNESS FOR BASIC FALL ARREST (CLASS A)

Ref. PN 16

Equipped with fully adjustable chest, shoulder and thigh straps, PN 16 is the basic Harness for fall arrest.

IS 3521(Part 1):2021



FULL BODY HARNESS FOR POSITIONING (CLASS P)

Ref. PN 17

Along with all the features of PN 16, PN 17 has two Lateral D-Rings at the sides for positioning at heights.

IS 3521(Part 1):2021

Technical Snapshot									
Ref.	Material	Application	Attachment Points				Weight	Adjustability	Certified t
			Dorsal	Sternal	Lateral	Ventral			
PN 14	Polyester	FA	✓	✓			980 gms	Adjustable thigh straps.	IS 3521(Part 1):2021
PN 16		FA	✓				1.10 kg	Adjustable chest, shoulder, and thigh straps.	
PN 17		FA+WP	✓		✓		1.31 kg	Adjustable chest, waist and thigh straps.	

FA - Fall Arrest / WP - Work Positioning



FULL BODY HARNESS FOR TOWER CLIMBING (CLASS L)

Ref. PN 18

Equipped with all the features of basic Harness, PN 18 is the best Harness for tower climbing.

IS 3521(Part 1):2021



FULL BODY HARNESS FOR TOWER CLIMBING (CLASS L)

Ref. PN 18(H)

Along with Dorsal and Sternal D-ring for fall arrest, PN 18(H) has straight thigh straps for more comfort to the user.

IS 3521(Part 1):2021



FULL BODY HARNESS FOR ENTRY AND EXIT IN CONFINED SPACE (CLASS E)

Ref. PN 19

PN 19 is the Harness specifically meant for lowering or raising of personnel and rescue in confined space.

IS 3521(Part 1):2021

Technical Snapshot									
Ref.	Material	Application	Attachment Points				Weight	Adjustability	Certified t
			Dorsal	Sternal	Lateral	Ventral			
PN 18	Polyester	FA	✓	✓			1.25 kg	Adjustable chest, shoulder, and thigh straps.	IS 3521(Part 1):2021
PN 18(H)		FA	✓	✓			1.34 kg		
PN 19		FA+R	✓				1.03 kg		

FA - Fall Arrest / R - Rescue

E-CON RESTRAINT LANYARDS

KARAM E-Con Harnesses also come with an option of Polypropylene and Polyamide Lanyards of 2.0m spliced at the Dorsal D-ring.



Ref. PN 204(PP)

Equipped with 2.0m Restraint Lanyard, the Lanyard has one side loop and Steel Snap Hook PN 121 on the other side.



Ref. PN 206N(PP)

Equipped with 2.0m Restraint Lanyard, the Lanyard has one side loop and Steel Scaffold Hook PN 131N on the other side.



Ref. PN 206N(D)(PP)

Equipped with two Restraint Lanyards of 2.0m each, these Lanyard consists of one side loop and Steel Scaffold Hook PN 131N on the other side.

KI SERIES

Working conditions are changing globally, becoming more challenging and competitive. So, to address the safety needs of people working on heights, KARAM has upgraded its KI Series of Harnesses to ensure comfort, best fit, ease of use, style, durability, reliability, and compliance.

Salient Features!



Scan here *for a virtual tour of the product*

Improvised Registered Webbing Design

The new webbing maintains comfort at all times without compromising on mobility.

Heavy-Duty Webbing

The Harness has a heavy-duty webbing that is almost twice as strong as the standards require, and is certain to provide the longest service life possible.

Enhanced Sit Strap Design

The KI range of Harnesses comes with a new design of sit strap to increase its durability.

Re-Engineered Registered Stitching Pattern

Automatic, computerized stitching pattern on the Harnesses to ensure the accurate number of stitches per inch. This ensures consistency of breaking strength of each stitched point.

Harness Webbing Features



Superior strength



Highly durable



High abrasion resistance



UV resistance



Ref. KI 01

Basic IS compliant Harness, having adjustable chest and thigh straps, along with a Dorsal D-ring for fall arrest.

IS 3521(Part 1):2021



Ref. KI 02

Has two chest attachment D-rings with adjustable chest and thigh straps.

IS 3521(Part 1):2021

Technical Snapshot									
Ref.	Material	Application	Attachment Points				Weight	Adjustability	Certified t
			Dorsal	Sternal	Lateral	Ventral			
KI 01	Polyester	FA	✓				890 gms	Adjustable chest and thigh straps.	IS 3521(Part 1):2021
KI 02		FA	✓	✓			1.04 kg		

KI SERIES RESTRAINT LANYARDS

KARAM KI Series Harnesses also come with an option of Polypropylene and Polyamide Lanyards of 2.0m spliced at the Dorsal D-ring.



Ref. PN 204(PP)G

Equipped with 2.0m Restraint Lanyard, the Lanyard has one side loop and Steel Snap Hook PN 121 on the other side.



Ref. PN 206N(PP)G

Equipped with 2.0m Restraint Lanyard, the Lanyard has one side loop and Steel Scaffold Hook PN 131N on the other side.



Ref. PN 206N(D)(PP)G

Equipped with two Restraint Lanyards of 2.0m each, these Lanyard consists of one side loop and Steel Scaffold Hook PN 131N on the other side.

FA - Fall Arrest

WORK POSITIONING BELTS

EN 358:2018

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

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 centre of his waist for smooth functioning.

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



Ref. PN 01



Ref. PN 02



Ref. PN 03

Technical Snapshot						
Ref.	**Width of Back Pad**	**Attachment Elements**	**Convenience**	**Weight**	**Sizes**	**Certified t**
PN 01	21.0cm	Two Lateral D-rings for work positioning	Rings for tool holders, bolt bags, etc.	680gms	Medium, Large, Extra Large	EN 358:2018
PN 02	14.5cm		Tool holding webbing loops and rings for tool holders, bolt bags, etc.	640gms		
PN 03	14.5cm		Rings for tool holders, bolt bags, etc.	520gms		

SUSPENSION INTOLERANCE STRAP

Ref. STS 01(N)

- Specially designed to help relieve the negative effects of Suspension Trauma.
- Compact and light-weight. Does not hamper with the activity of the worker while at work.
- Easy to attach to the harness with the help of the textile loop and velcro provided.

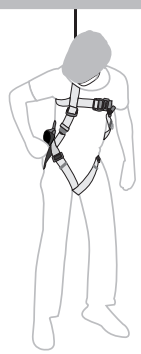
***Scan here** for a virtual tour of the product*



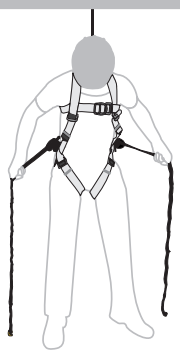


KARAM provide Harnesses fitted with Suspension Intolerance Strap on request.

STEPS TO USE



Unzip the pouches fitted on both sides of the harness.



Hold the 2 straps together.



connect the straps with each other making a loop with the help of the easy-to-use buckle.



Put your feet into the loop.



Stand onto the loop, so that the thigh straps are free to move.



Adjust the sit strap towards the front to release pressure and give a sitting posture.

TOOLS LANYARDS

"Prevent Tool Drops with KARAM Tool Lanyards"

- **Protect Yourself and Others**: Accidents can happen when tools slip from the hands of workers at height. Our tool lanyards securely hold tools up to 10 kg, preventing dangerous falls.
- **Built to Last**: Crafted from durable polyester webbing and aluminium components, KARAM lanyards offer exceptional strength and longevity, even in the most demanding conditions.
- **Enhanced Safety and Efficienc** : Comes with an elastic design to provide freedom of movement and tangle-free operation, ensuring your safety and productivity.

***Scan here** for a virtual tour of the product*

GENERAL FEATURES

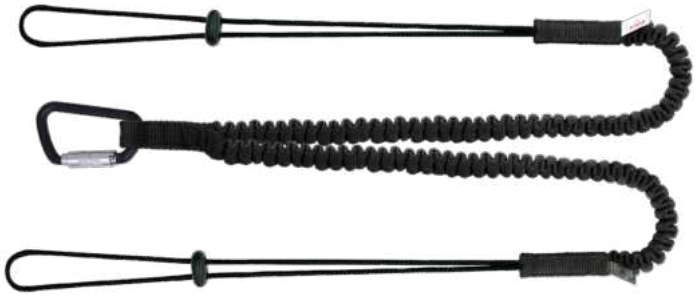
- Made of 20mm wide tubular webbing.
- Provided with a light-weight Karabiner for attachment to the user's belt.
- Relaxed length: 85cm
- Expanded length: 135cm



TOOLS LANYARD

Ref. TL 01(N)

Convenient stretch-lanyard for tool holding.



TWIN TOOLS LANYARD

Ref. TL 02(N)

Convenient "Y" leg stretch-lanyard for tool holding, allow the user to attach and carry 2 tools.

NEW



RETRACTABLE TOOLS LANYARD

Ref. TL 10

- Light weight and easy to use.
- Comes with high impact resistant polymer casing with galvanized steel wire rope of dia 2.5mm.
- Equipped with Quarter Turn Locking Karabiner with swivel ring PN 1002 for attaching the tools.
- Locks at the desired length for preventing unwanted sag & entangling.
- Maximum extended length: 1.4m.
- Can hold tools weighing up to 2.2kg.



HOOKS AND KARABINERS



To meet the different hazard situations encountered in the field, KARAM offers a wide range of Hooks and Karabiners having distinguished features. The range is designed for a specific use based on its material, shape, size, gate-opening capacity and locking system.

Advantages of Different Types of Karabiners

Based on the locking mechanism there are different types of Karabiners which include screw-gate type, double action and triple action to meet different needs for each application for a precise balance between ergonomics and safety.



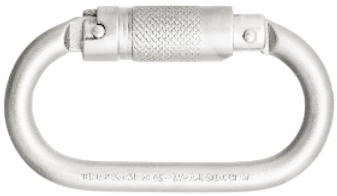
SCREW LOCKING KARABINER

- Reliability in harsh or dirty environments.
- Immediate alert in case of wrong locking.
- Features a threaded nut over gate which locks manually when desired by user.
- Easier to employ with one-hand.



DOUBLE ACTION LOCKING KARABINER

- Fast and rapid auto-locking.
- Speed and ease in opening.



TRIPLE ACTION LOCKING KARABINER

- Highest security.
- Rapid auto-locking.

Scan here *for a virtual tour of the product*



HARDNESS TESTING



PROOF LOAD TESTING

Testing

TESTED & CERTIFIED

CE UIAA IS 3521(Part 5):2021 ISI CM/L 8300149208



SALT SPRAY TESTING



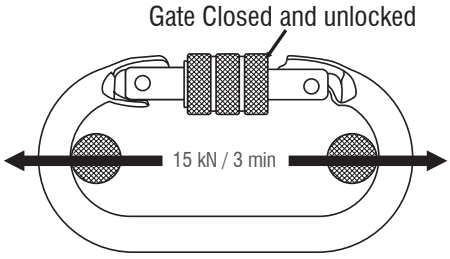
GATE STRENGTH TESTING

HOOKS AND KARABINERS MANUFACTURING

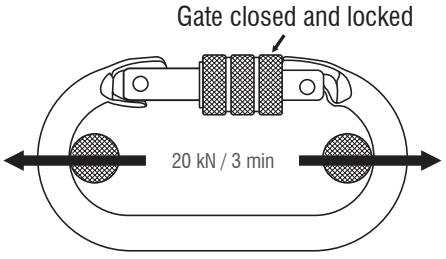
KARAM manufactures the entire range of its Hooks and Karabiners all in house. Starting with raw material such as rod and metal plate, which passes through various operations like Shearing, Stamping, Hot Forging, Cold Forging, Turning and Forming on state of the art machinery. KARAM also has the most advanced Metal-finishing plants, that provide extremely smooth and bright look to all the Hooks and Karabiners.

Intensive In-process Quality Checks and stringent batch testing of all the Karabiners ensures that each and every KARAM product conforms to parameters that are marked significantly higher than what is specified in various norms.

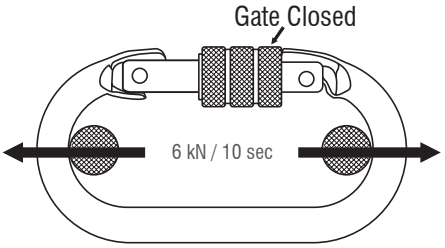
TESTED CARRIED OUT ON ALL TYPES KARABINERS AS PER EN 362:2004



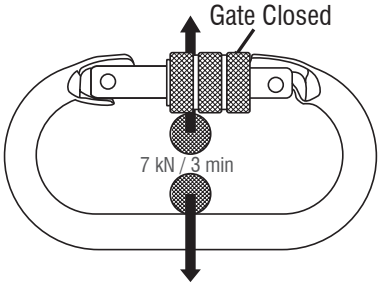
The Karabiner must not Break



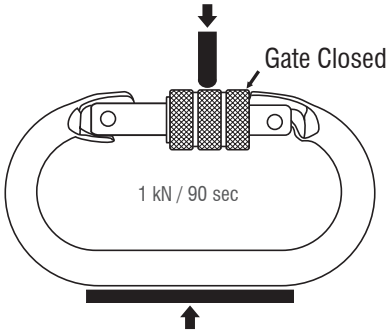
The Karabiner must not Break



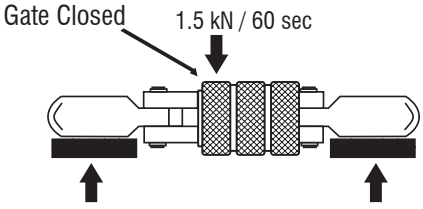
After the test, the gate shall open like new one.
(Gate Function)



The Karabiner must not Break
(Minor Axis)

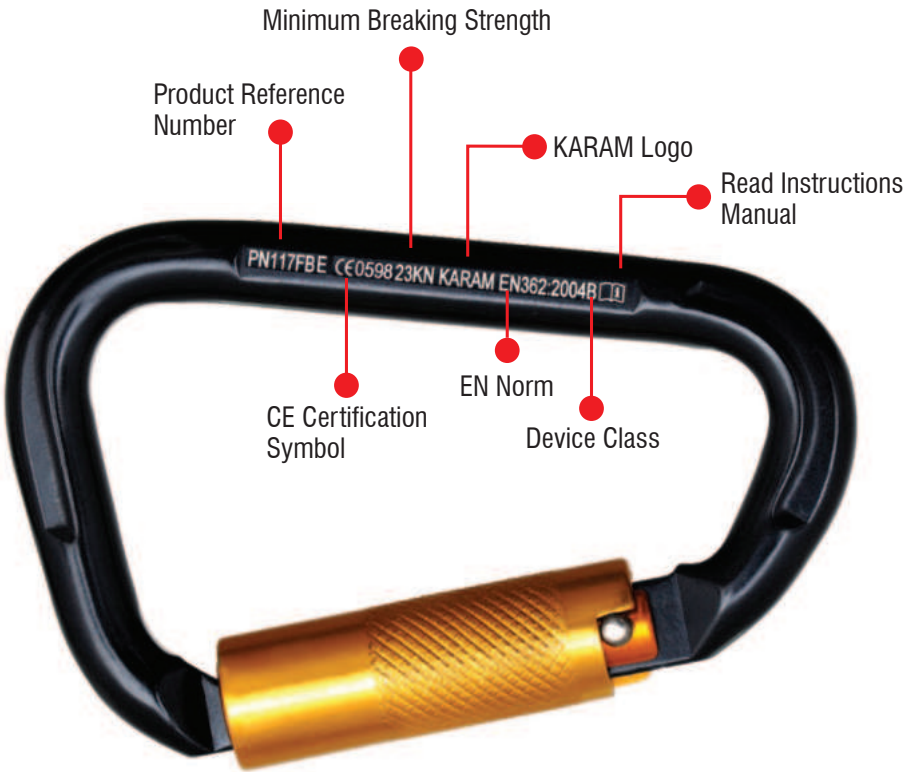


After the test, the gate shall open like new one.
Gate Resistance (Gate Face)



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

MARKING EXPLANATION



PROOF LOAD TESTING

To ensure complete compliance of the Load bearing metal components, the Hooks and Karabiners are proof load tested at a static load of 16kN.

SPECTROMETER TESTING

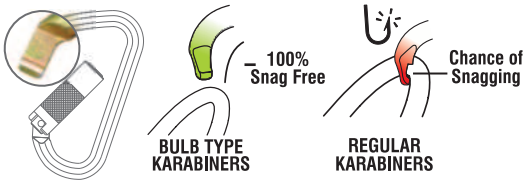
This is a mandatory test which is performed by KARAM on all the raw materials of the metal components, to determine their exact chemical composition, which is vital for their strength performance.



BULB TYPE KARABINERS

KARAM offers Bulb-type Karabiners with unique Keylock System. Hence the body/gate interface unlike the regular Karabiners, does not snag on Anchors, Ropes, Harness equipment loops, etc.

Certified to EN 362:2004.





Captive Pin - This is an Additional Pin fitted to the Karabiner to prevent it from disengaging from the Lanyard. The code for the product is written as the Ref. no. of the product along with (C), for eg. PN 111BE(C).

Available with Captive Pin on request.



Forged

** Available with Captive Pin*

Aluminium Screw Locking Bulb Type Karabiner

Ref. PN 105



Forged

** Available with Captive Pin*

Aluminium Quarter Turn Locking Bulb Type Karabiner

Ref. PN 106



Forged

** Available with Captive Pin*

Aluminium Triple Action Locking Bulb Type Karabiner

Ref. PN 107



Forged

** Available with Captive Pin*

Steel Quarter Turn Locking Bulb Type Karabiner

Ref. PN 111BE

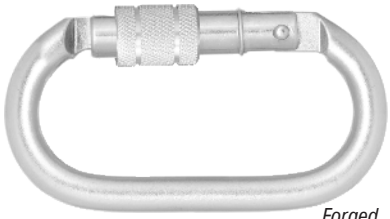


Forged

** Available with Captive Pin*

Stainless Steel Quarter Turn Locking Bulb Type Karabiner

Ref. PN 111BESS



Forged

** Available with Captive Pin*

Steel Screw Locking Bulb Type Karabiner

Ref. PN 112BE



Forged

** Available with Captive Pin*

Steel Screw Locking Bulb Type Karabiner with Lock Indicator

Ref. PN 112B(LI)



Forged

** Available with Captive Pin*

Steel Quarter Turn Locking Bulb Type Karabiner

Ref. PN 113BE



Forged

** Available with Captive Pin*

Steel Triple Action Locking Bulb Type Karabiner

Ref. PN 114BE



Forged

** Available with Captive Pin*

Steel Quarter Turn Locking Bulb Type Karabiner

Ref. PN 115BE



Forged

** Available with Captive Pin*

Steel Triple Action Locking Bulb Type Karabiner

Ref. PN 115TBE



Forged

** Available with Captive Pin*

Stainless Steel Quarter Trun Bulb Type Locking Karabiner

Ref. PN 115BE SS



* Available with Captive Pin Forged

Stainless Steel Triple Action Locking Bulb Type Karabiner

Ref. PN 115TBE SS



* Available with Captive Pin Forged

Aluminium Screw Locking Bulb Type Karabiner

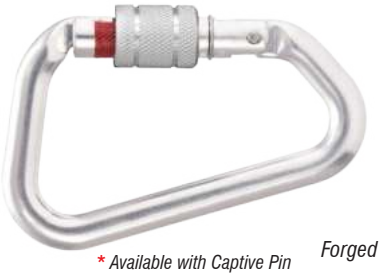
Ref. PN 116BE



* Available with Captive Pin Forged

Aluminium Screw Locking Bulb Type Karabiner

Ref. PN 116FBE



* Available with Captive Pin Forged

Aluminium Screw Locking Bulb Type Karabiner with Lock Indicator

Ref. PN 116B(LI)



* Available with Captive Pin Forged

Aluminium Quarter Turn Locking Bulb Type Karabiner

Ref. PN 117BE

Technical Snapshot

Ref.	Material	Gate Opening	Minimum Breaking Strength	Net Weight	Finish	Certified t
PN 105	Aluminium alloy	15.0mm	23kN	80.0gm	Natural Silver/ Coloured anodized	EN 362:2004 Class B
PN 106		14.0mm		85.0gm		
PN 107		14.0mm				
PN 111BE	Alloy steel	15.0mm		200.0gm	Natural Silver	
PN 111BE SS	Stainless steel	15.0mm		195.5gm	Polished	
PN 112BE	Alloy steel	15.0mm		167.0gm	Natural Silver	
PN 112B(LI)		16.0mm		167.0gm		EN 362:2004 Class B, Class M
PN 113BE		22.0mm	45kN	250.0gm		EN 362:2004 Class B
PN 114BE		22.0mm		248.0gm		
PN 115BE	Alloy steel	17.0mm	23kN	206.0gm	Natural Silver	
PN 115TBE		17.0mm		203.0gm		
PN 115BE SS	Stainless Steel	17.0mm		215.0gm	Polished	
PN 115TBE SS		14.0mm		215.0gm		
PN 116BE	Aluminium Alloy	21.0mm		82.0gm	Natural Silver / Coloured Anodized	EN 362:2004 Class B ATEX 2014/34/ EU
PN 116FBE		20.0mm		82.0gm		EN 362:2004 Class B
PN 116B(LI)		21.0mm		82.0gm		
PN 117BE		20.0mm		87.0gm		



Forged

* *Available with Captive Pin*

Aluminium Quarter Turn Locking Bulb Type Karabiner

Ref. PN 117FBE



Forged

* *Available with Captive Pin*

Aluminium Triple Action Locking Bulb Type Karabiner

Ref. PN 118BE



Forged

* *Available with Captive Pin*

Aluminium Triple Action Locking Bulb Type Karabiner

Ref. PN 118FBE



Forged

* *Available with Captive Pin*

Steel Triple Action Locking Bulb Type Karabiner

Ref. PN 119TBE



Forged

* *Available with Captive Pin*

Stainless Steel Triple Action Locking Bulb Type Karabiner

Ref. PN 119TBESS



Forged

Aluminium Swivel Quarter Turn Locking Bulb Type Hook with Fall Indicator

Ref. PN 130



Forged

Aluminium Swivel Quarter Turn Locking Bulb Type Hook without Indicator

Ref. PN 130P



Forged

Aluminium Swivel Triple Action Locking Bulb Type Hook with Fall Indicator

Ref. PN 130T

Technical Snapshot

Ref.	Material	Gate Opening	Minimum Breaking Strength	Net Weight	Finish	Certified t
PN 117FBE	Aluminium Alloy	21.0mm	23kN	87.0gm	Natural Silver / Coloured Anodized	EN 362:2004 Class B
PN 118BE		20.0mm		87.0gm		
PN 118FBE		20.0mm		87.0gm		
PN 119TBE	Alloy Steel	16.0mm	25kN	190.0gm	Natural Silver	
PN 119TBE SS	Stainless Steel	13.5mm	23kN	185.0gm	Polished	
PN 130	Aluminium Alloy	18.0mm		182.0gm	Natural Silver / Coloured Anodized	EN 362:2004 Class T
PN 130P		18.0mm		185.0gm		
PN 130T		18.0mm		182.0gm		



Forged

Aluminium Quarter Turn Locking Bulb Type Hook

Ref. PN 160



Forged

Aluminium Triple Action Locking Bulb Type Hook

Ref. PN 160T



Forged

Steel Swivel Quarter Turn Locking Bulb Type Snap Hook with Load Indicator

Ref. PN 165



Forged

Steel Swivel Triple Action Locking Bulb Type Snap Hook with Load Indicator

Ref. PN 165T



Forged

* Available with Captive Pin

Aluminium Screw Locking Bulb Type Karabiner

Ref. PN 192BE



Forged

* Available with Captive Pin

Aluminium Quarter Turn Locking Bulb Type Karabiner

Ref. PN 193BE

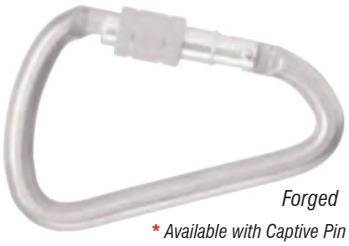


Forged

* Available with Captive Pin

Aluminium Triple Action Locking Bulb Type Karabiner

Ref. PN 193TBE

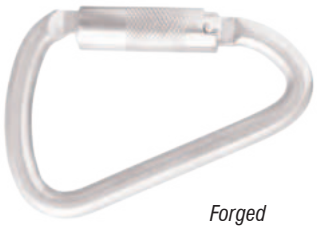


Forged

* Available with Captive Pin

Steel Screw Locking Bulb Type Karabiner

Ref. PN 194BE



Forged

* Available with Captive Pin

Steel Quarter Turn Locking Bulb Type Karabiner

Ref. PN 195BE

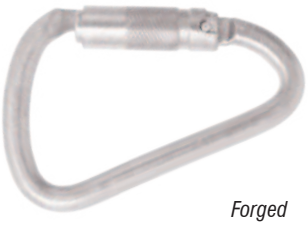


Forged

* Available with Captive Pin

Stainless Steel Quarter Turn Locking Bulb Type Karabiner

Ref. PN 195BESS



Forged

* Available with Captive Pin

Steel Triple Action Locking Bulb Type Karabiner

Ref. PN 195TBE



Forged

* Available with Captive Pin

Stainless Steel Triple Action Locking Bulb Type Karabiner

Ref. PN 195TBESS

Technical Snapshot						
Ref.	**Material**	**Gate Opening**	**Minimum Breaking Strength**	**Net Weight**	**Finish**	**Certified t**
PN 160	Aluminium Alloy	22.0mm	23kN	136.0gm	Natural Silver / Colored anodized	EN 362:2004 Class T
PN 160T		22.0mm		136.0gm		
PN 165	Alloy Steel	22.0mm		400.0gm	Natural Silver, shot blasted on request	
PN 165T		21.0mm		400.0gm		
PN 192BE	Aluminium Alloy	25.0mm		95.0gm	Natural silver / Colored anodized	EN 362:2004 Class B
PN 193BE		24.0mm		122.0gm		
PN 193TBE		24.0mm		93.0gm		
PN 194BE	Alloy Steel	27.0mm	50kN	222.0gm	Natural Silver	
PN 195BE		25.0mm		270.0gm		
PN 195BESS	Stainless Steel	25.0mm		280.0gm	Polished	
PN 195TBE	Alloy Steel	25.0mm		260.0gm	Natural Silver	
PN 195TBESS	Stainless Steel	25.0mm		280.0gm	Polished	

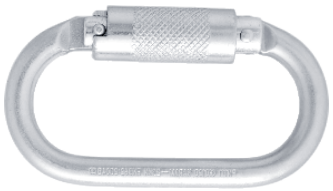
STEEL HOOKS AND KARABINERS

KARAM provides Steel Karabiners having screw locking, twist locking and triple locking features, to suit a wide range of applications and a variety of Steel Hooks to suit the application as per the user's requirement.



Captive Pin - This is an Additional Pin fitted to the Karabiner to prevent it from disengaging from the Lanyard. The code for the product is written as the Ref. no. of the product along with (C), for eg. PN 111(C).

Available with Captive Pin on request.



* *Available with Captive Pin*

Steel Quarter Turn Locking Karabiner

Ref. PN 111



* *Available with Captive Pin*

Stainless Steel Quarter Turn Locking Karabiner

Ref. PN 111SS



* *Available with Captive Pin*

Steel Screw Locking Karabiner

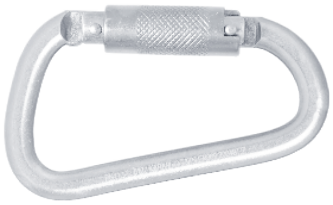
Ref. PN 112



* *Available with Captive Pin*

Steel Screw Locking Karabiner with Lock Indicator

Ref. PN 112(LI)



* *Available with Captive Pin*

Steel Quarter Turn Locking Karabiner

Ref. PN 113



* *Available with Captive Pin*

Stainless Steel Quarter Turn Locking Karabiner

Ref. PN 113SS

Technical Snapshot

Ref.	Material	Gate Opening	Minimum Breaking Strength	Net Weight	Finish	Certified t
PN 111	Alloy steel	16.0mm	25kN	195.0gm	Natural Silver	EN 362:2004 Class B IS 3521(Part 5):2021
PN 111SS	Stainless steel	16.0mm	23kN	198.0gm	Polished	EN 362:2004 Class B
PN 112	Alloy steel	18.0mm	25kN	160.5gm	Natural Silver	EN 362:2004 Class B Class M ATEX 2014/34/EU
PN 112(LI)		18.0mm	23kN	158.0gm		EN 362:2004 Class B Class M
PN 113		22.0mm	40kN	236.0gm		EN 362:2004 Class B IS 3521 (Part 5):2021
PN 113SS	Stainless steel	22.0mm	25kN	235.0gm	Polished	EN 362:2004 Class B



* Available with Captive Pin

Steel Triple Action Locking Karabiner

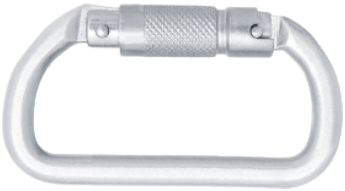
Ref. PN 114



* Available with Captive Pin

Steel Quarter Turn Locking Karabiner

Ref. PN 115



* Available with Captive Pin

Steel Triple Action Locking Karabiner

Ref. PN 115T



* Available with Captive Pin

Stainless Steel Quarter Turn Locking Karabiner

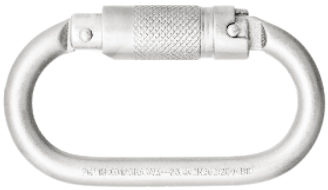
Ref. PN 115SS



* Available with Captive Pin

Stainless Steel Triple Action Locking Karabiner

Ref. PN 115TSS



* Available with Captive Pin

Steel Triple Action Locking Karabiner

Ref. PN 119T



* Available with Captive Pin

Stainless Steel Triple Action Locking Karabiner

Ref. PN 119TSS



* Available with Captive Pin

Steel Quarter Turn Locking Karabiner

Ref. PN 195



* Available with Captive Pin

Steel Triple Action Locking Karabiner

Ref. PN 195T



* Available with Captive Pin

Stainless Steel Quarter Turn Locking Steel Karabiner

Ref. PN 195SS



* Available with Captive Pin

Stainless Steel Triple Action Locking Karabiner

Ref. PN 195TSS

Technical Snapshot						
Ref.	**Material**	**Gate Opening**	**Minimum Breaking Strength**	**Net Weight**	**Finish**	**Certified t**
PN 114	Alloy steel	22.0mm	40kN	233.4gm	Natural Silver	EN 362:2004 Class B
PN 115		19.5mm	23kN	210.0gm		
PN 115T		19.5mm		210.0gm		
PN 115SS	Stainless steel	19.5mm		198.0gm	Polished	
PN 115TSS		19.0mm		195.0gm		
PN 119T	Alloy steel	16.0mm	25kN	190.0gm	Natural Silver	
PN 119TSS	Stainless steel	18.0mm	23kN	185.0gm	Polished	
PN 195	Alloy steel	25.0mm	50kN	250.0gm	Natural Silver	
PN 195T		25.0mm		250.0gm		
PN 195SS	Stainless steel	25.0mm		265.0gm	Polished	
PN 195TSS		25.0mm		270.0gm		



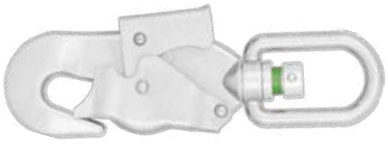
Steel Snap Hook

Ref. PN 121



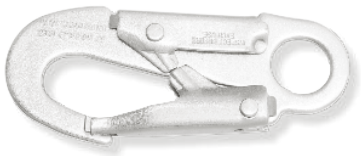
Steel Swivel Snap Hook

Ref. PN 122



Steel Swivel Snap Hook with Load Indicator

Ref. PN 123



Steel Snap Hook

Ref. PN 124



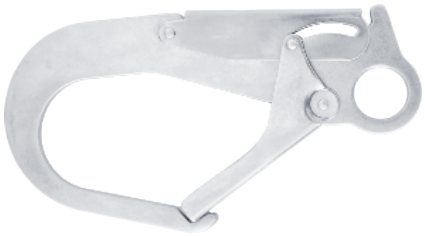
Steel Scaffold Hook

Ref. PN 131N



Steel Tower Hook

Ref. PN 132



Steel Scaffold Hook

Ref. PN 133



Steel Tower Hook

Ref. PN 134



Steel Tower Hook

Ref. PN 135

Technical Snapshot

Ref.	Material	Gate Opening	Minimum Breaking Strength	Net Weight	Finish	Certified t
PN 121	Alloy steel	18.0mm	23kN	205.3gm	Natural Silver, shot blasted on request	EN 362:2004 Class T IS 3521(Part 5):2021
PN 122		12.0mm		334.9gm		EN 362:2004 Class T
PN 123		12.0mm		345.5gm		
PN 124		21.0mm		274.0gm		
PN 131N		50.0mm		473.0gm		EN 362:2004 Class T IS 3521(Part 5):2021
PN 132		85.0mm		850.5gm		EN 362:2004 Class T
PN 133		55.0mm		490.0gm		
PN 134		50.0mm		725.0gm		EN 362:2004 Class B
PN 135		59.0mm		745.0gm		



Steel Pole Strap Snap Hook
Ref. PN 150



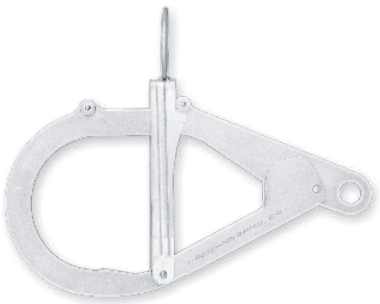
Forged

Steel Quarter Turn Locking Hook
Ref. PN 152



Forged

Steel Triple Action Locking Hook
Ref. PN 152T



Steel Anchorage Hook
Ref. PN 156



Forged

Steel Standard Snap Hook
Ref. PN 158



Forged

Steel Swivel Snap Hook with Load Indicator
Ref. PN 162



Stainless Steel Swivel Snap Hook with Load Indicator
Ref. PN 162SS



Forged

Steel Snap Hook
Ref. PN 171

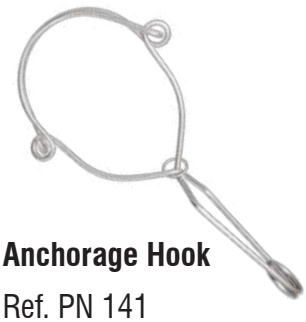


Steel Triple Action Locking Scaffold Hook
Ref. PN 177

Technical Snapshot						
Ref.	**Material**	**Gate Opening**	**Minimum Breaking Strength**	**Net Weight**	**Finish**	**Certified t**
PN 150	Alloy steel	17.0mm	23kN	259.0gm	Natural Silver	EN 362:2004 Class T
PN 152		20.0mm	25kN	278.0gm		
PN 152T		20.0mm	23kN	278.0gm		
PN 156		90.0mm	22kN	880.0gm		EN 795:2012 Type B
PN 158		12.0mm	23kN	315.0gm		EN 362:2004 Class T
PN 162		20.0mm		380.0gm		EN 362:2004 Class T IS 3521 (Part 5):2021
PN 162SS	Stainless steel	20.0mm		380.0gm	Polished	EN 362:2004 Class T
PN 171	Alloy steel	19.0mm		300.0gm	Natural Silver	
PN 177	Alloy steel	50.8mm		536.0gm		

ANCHORAGE HOOKS

Our range of Stainless Steel Anchorage Hooks offers openings from 75mm to 140mm. Buffed and Polished finish make them unique when compared to other options available in the market.



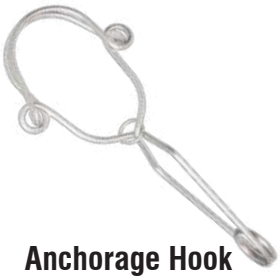
Anchorage Hook

Ref. PN 141



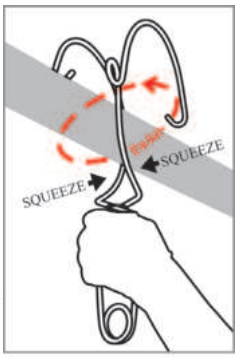
Anchorage Hook

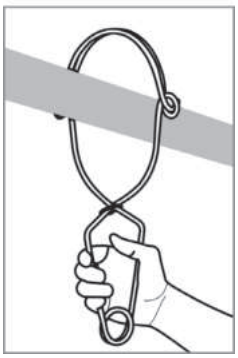
Ref. PN 142



Anchorage Hook

Ref. PN 143





Technical Snapshot

Ref.	Material	Gate Opening	Minimum Breaking Strength	Net Weight	Finish	Certified t
PN 141	Stainless steel	140.0mm	20kN	362.0gm	Polished	EN 362:2004 Class A
PN 142		110.0mm		315.0gm		
PN 143		75.0mm		306.0gm		

ALUMINIUM HOOKS AND KARABINERS

Where it is important to carry light-weight Karabiners at height to provide maximum comfort and safety to the user, this range of Aluminium Karabiners by KARAM fulfill all the required needs. Manufactured from high-quality Aluminium Alloy, these karabiners come in highly engineered designs, conforming to all the clauses laid down in the EN Norms.



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

Available with Captive Pin on request.



ALUMINIUM KARABINERS



Forged

* Available with Captive Pin

Aluminum Screw Locking Karabiner

Ref. PN 116



Forged

* Available with Captive Pin

Aluminium Screw Locking Karabiner with Lock Indicator

Ref. PN 116(LI)



Forged

* Available with Captive Pin

Aluminium Screw Locking Karabiner

Ref. PN 116F



Forged

* Available with Captive Pin

Aluminium Quarter Turn Locking Karabiner

Ref. PN 117



Forged

* Available with Captive Pin

Aluminium Quarter Turn Locking Karabiner

Ref. PN 117F



Forged

* Available with Captive Pin

Aluminium Triple Action Locking Karabiner

Ref. PN 118



Forged

* Available with Captive Pin

Aluminium Triple Action Locking Karabiner

Ref. PN 118F

Technical Snapshot

Ref.	Material	Gate Opening	Minimum Breaking Strength	Net Weight	Finish	Certified t
PN 116	Aluminium alloy	22.0mm	23kN	74.6gm	Natural Silver / Coloured galvanized	EN 362:2004 Class B EN 12275:2013 Class B/H ATEX 2014/34/EU
PN 116(LI)		22.5mm	23kN	74.6gm		EN 362:2004 Class B EN 12275:2013 Class B/H
PN 116F		22.0mm	23kN	74.6gm		
PN 117		21.0mm	23kN	84.0gm		EN 362:2004 Class B EN 12275:2013 Class B/H ATEX 2014/34/EU
PN 117F		21.0mm	23kN	84.0gm		EN 362:2004 Class B EN 12275:2013 Class B/H
PN 118		21.0mm	23kN	79.0gm		
PN 118F		21.0mm	23kN	79.0gm		



Aluminium Screw Locking Snap Hook

Ref. PN 126



Aluminium Quarter Turn Locking Snap Hook

Ref. PN 127



Aluminium Triple Action Locking Snap Hook

Ref. PN 128



Forged

Aluminium Snap Hook

Ref. PN 129



Forged

Aluminium Scaffold Hook

Ref. PN 136



Forged

Aluminium Scaffold Hook

Ref. PN 138



Aluminium Tower Hook

Ref. PN 139



Forged

Aluminium Anchorage Hook

Ref. PN 154



Forged

Aluminium Scaffold Hook

Ref. PN 180



Forged

Aluminium Scaffold Swivel Hook

Ref. PN 181

Technical Snapshot						
Ref.	**Material**	**Gate Opening**	**Minimum Breaking Strength**	**Net Weight**	**Finish**	**Certified t**
PN 126	Aluminium alloy	22.0mm	23kN	80.0gm	Natural Silver / Coloured anodized	EN 362:2004 Class B EN 12275:2013 Class B/H
PN 127		21.0mm		87.4gm		
PN 128		21.0mm		87.0gm		
PN 129		18.5mm		160.0gm		EN 362:2004 Class T
PN 136		60.0mm	22kN	480.0gm		EN 362:2004 Class A/T EN 12275:2013 Class K/T
PN 138		109.0mm	20kN	900.0gm		EN 362:2004 Class T
PN 139		60.0mm		262.0gm		EN 362:2004 Class A/T
PN 154		65.0mm	22kN	480.0gm		EN 362:2004 Class A EN 795:2012 Type B
PN 180		60.0mm	23kN	475.0gm		EN 362:2004 Class T
PN 181		60.0mm		660.0gm		

DIELECTRIC HOOKS

CE

These Dielectric Hooks are completely electrically insulated and have been specially designed for workers working in conditions where there are possible electrical hazards.



Dielectric Scaffold Hook

Ref. PN 166



Dielectric Snap Hook

Ref. PN 172

Technical Snapshot							
Ref.	**Material**	**Gate Opening**	**Minimum Breaking Strength**	**Net Weight**	**Finish**	**Minimum Dielectric Resistance**	**Certified t**
PN 166	Specially compounded Polymer with Steel reinforcement	57.0mm	23kN	560.0gm	Moulded	14kV	EN 362:2004 Class T
PN 172		20.0mm		350.0gm		35kV	

LANYARDS



A Lanyard is described as the connecting element of a system. The Energy Absorbing Lanyards incorporate a Shock Absorbing element which is capable of limiting the force felt on the body of the worker to less than 6kN. Depending upon the specific usage, Lanyards are classified as follows: Work Positioning Lanyards, Restraint Lanyards, Fall Arrest Lanyards, and Forked Lanyards. KARAM offers an exhaustive range of Lanyards made of Twisted rope, Kernmantle rope or Webbing, and different Connector combinations, as per the needs of the user.

Scan here *for a virtual tour of the product*

Standards at a glance

EN354:2010: Covers work positioning and restraint lanyards, allowing for various applications

EN355:2002: Specifies that lanyards for fall arrest must include a shock-absorbing element to reduce impact forces

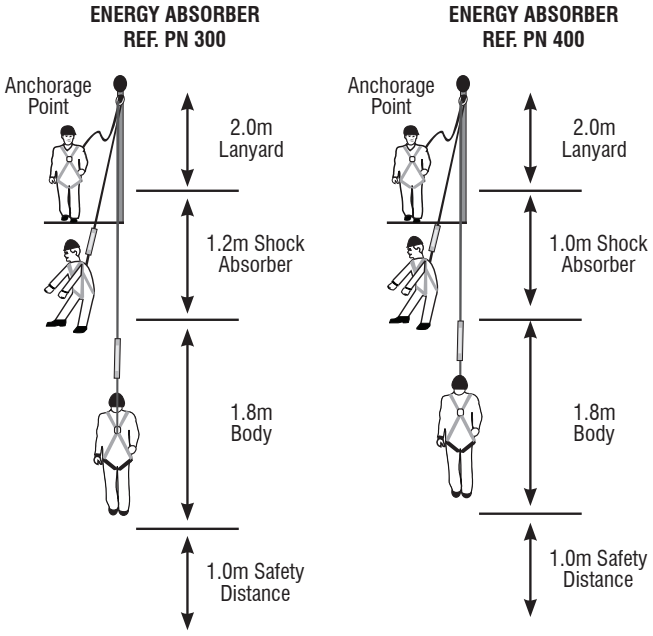
IS3521:Part 2 - 2021: Clearly states that only lanyards equipped with shock packs are certified for fall protection. Any lanyard without a shock pack is not compliant for fall protection activities.

What should be the Length of a KARAM Energy Absorbing Lanyard?

The standard maximum length of the Energy Absorbing Lanyard is 2.0m while a Lanyard should be long enough to be user-friendly, it is important to note that it must also be kept as short as possible to minimize the free fall distance. All KARAM Energy Absorbing Lanyards are tested and certified as per EN 355:2002 and IS 3521(Part 2):2021 for their maximum length of 2.0m.

What should be the minimum fall clearance distance when using an Energy Absorbing Lanyard?

It is extremely important to know the fall clearance distance while working at a height using the appropriate Fall Protection System. While anchored vertically above the head level, the length of the Lanyard used and the elongation of the Energy Absorber which occurs in the event of a fall become two of the important factors to determine the fall clearance. Always check for the minimum Fall clearance distance so that the risk of hitting an obstacle below is not there. In the worst case, where the user has climbed above the point of anchorage and has a free fall of 4.0m before the Lanyard has been activated, the minimum clearance required is 6.25m below the anchorage.



The Fall clearance is the safe clearance distance calculated from the anchorage point downwards.

Testing

TESTED & CERTIFIED

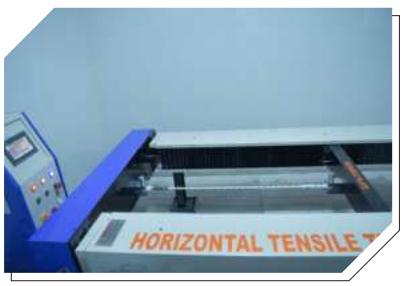
ANSI CE 0598

IS 3521(Part 2):2021

CM/L 8300145713



STATIC TEST OF WEBBING



STATIC TEST OF ROPE

WORK POSITIONING LANYARDS

KARAM offers a range of Work Positioning Lanyards, which can be used by the worker to position himself at a height in a safe and supported manner, and work with both hands free. These Lanyards can be connected to the Lateral D-Rings on the Work Positioning Belts or combination Harnesses and can be easily adjusted for their lengths to suit the application.

CE
EN 358:2018



WORK POSITIONING LANYARD WITH RING TYPE ADJUSTER

Ref. PN 241



WORK POSITIONING LANYARD WITH GRIP ADJUSTER

Ref. PN 242



WEBBING WORK POSITIONING LANYARD

Ref. PN 243



WORK POSITIONING LANYARD WITH RING ADJUSTER

Ref. PN 244



WORK POSITIONING LANYARD WITH GRIP ADJUSTER

Ref. PN 245



WORK POSITIONING LANYARD WITH GRIP ADJUSTER

Ref. PN 246



WORK POSITIONING LANYARD WITH GRIP ADJUSTER

Ref. PN 247



WORK POSITIONING LANYARD WITH GRIP ADJUSTER

Ref. PN 249

CE
EN 358:1999



WORK POSITIONING LANYARD WITH GRIP ADJUSTER

Ref. PN 249(F)



All Work Positioning Lanyards are also available with Protective Covering Sleeve to protect the rope from abrasion when the Lanyard is used around a structure in the event of work-positioning. The code for the product is written as the Ref. No. of the product along with (PR), for e.g. PN 241(PR)

Technical Snapshot

Ref.	Rope/ Webbing	Dia/ Width	Rope Grab / Adjuster	Attachment Type	Max. Length	Min. Breaking Strength	Certified t
PN 241	Twisted Rope	14mm	Ring type Adjuster	Steel Karabiner PN 112 at both the ends for attachment	2.0m	15kN	EN 358:2018
PN 242	Twisted Rope	14mm	Alloy Steel Non Openable Rope Grab RG 03				
PN 243	Polyester Webbing	33mm	Ring Type Adjuster				
PN 244	Kernmantle Rope	12mm	Ring Type Adjuster				
PN 245	Kernmantle Rope	12mm	Alloy Steel Non Openable Rope Grab RG 03				
PN 246	Twisted Rope	14mm	Alloy Steel Non Openable Rope Grab RG 04				
PN 247	Kernmantle Rope	12mm	Aluminium Rope Grab Openable Blocker RG 07				
PN 249	Kernmantle Rope	12mm	Openable Aluminium Alloy Rope Grab RG 09				EN 358:1999
PN 249(F)	Kernmantle Rope	12mm	Non-Openable Aluminium Alloy Rope Grab RG 09(F)				EN 358:2018



RESTRAINT LANYARDS

Restraint Lanyards are a part of the Restraint System needed at height. These lanyards prevent the user from reaching the edge and hence prevent a potential fall from occurring. Since no fall occurs in a “Fall Restraint System”, the Restraint Lanyards do not have any shock absorption element incorporated in them. It is therefore mandatory to ensure that **Fall Restraint Lanyards are never used for fall arrest.**

CE
EN 354:2010

RESTRAINT TWISTED ROPE LANYARDS

- Made up of 12mm dia Polyamide Twisted Rope.
- The spliced end is protected with a strong transparent protective covering sleeve, which 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, which prevents the rope from being damaged by the metallic contact of the connector.
- The rope also has a **colored tracer strand (age indicator) which loses its colour in due course of time, to show that the Lanyard is now unfit for fu ther use**.
- They are available in lengths 1.0m, 1.5m, 1.8m, and 2.0m.
- All Lanyards with different combinations of Karabiners mentioned below are individually certified as per EN 354:2010.



Ref.	Attachment End	Anchorage End	Weight* (±10gm)
PN 201	Loop	Loop	160gm
PN 202	Loop	PN 112	320gm
PN 203	PN 112	PN 112	490gm
PN 204	Loop	PN 121	380gm
PN 205	PN 121	PN 121	620gm
PN 206N	Loop	PN 131N	590gm
PN 206(A)	Loop	PN 136	620gm
PN 207	PN 112	PN 121	550gm
PN 208N	PN 112	PN 131N	780gm
PN 208(A)	PN 112	PN 136	800gm
PN 209N	PN 112	PN 131N	830gm
PN 209(A)	PN 112	PN 136	860gm



*Mentioned weights for length 1.0m

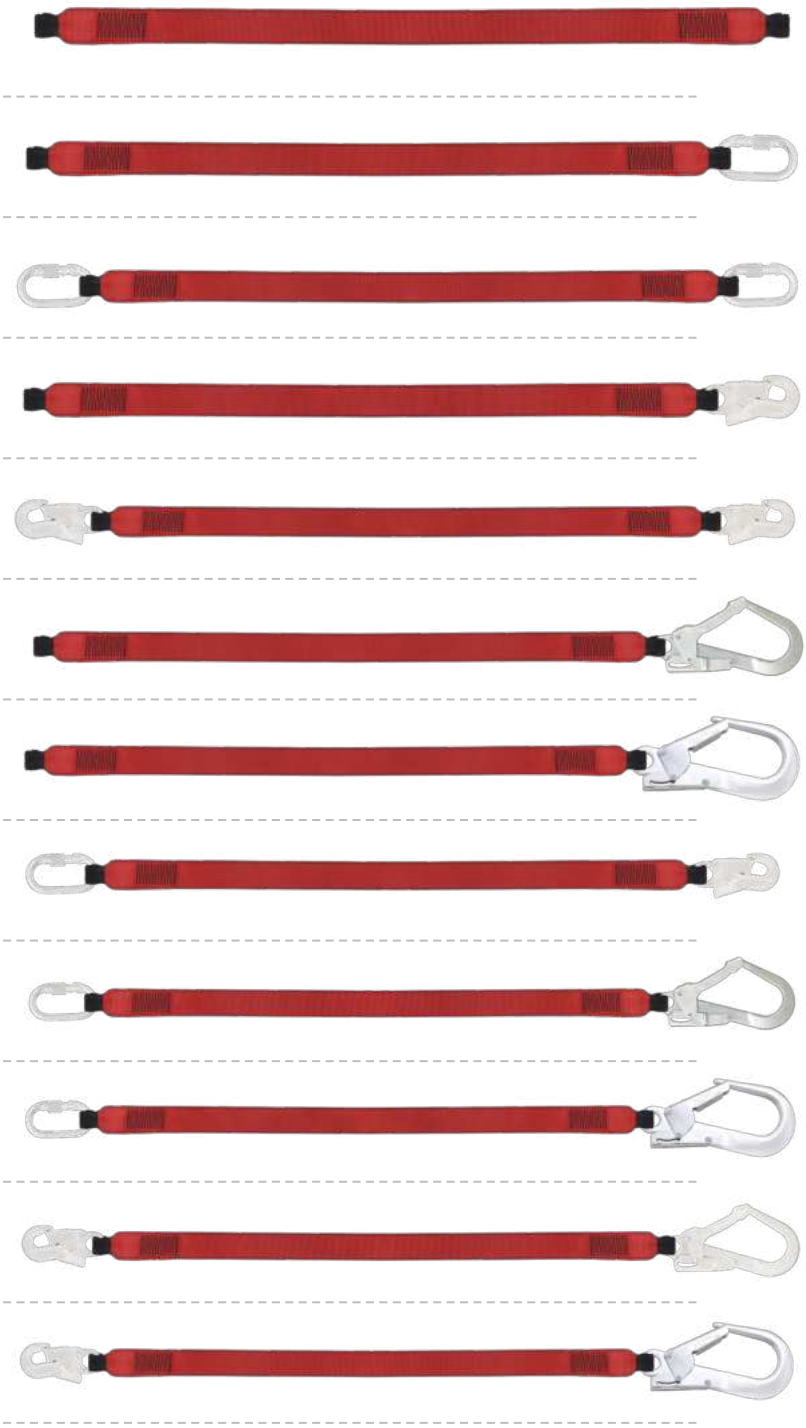
RESTRAINT WEBBING LANYARDS (44MM)

- Made up of 44mm 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.
- All Lanyards with different combinations of Karabiners mentioned below are individually certified as per EN 354:2010.

CE
EN 354:2010



Ref.	Attachment End	Anchorage End	Weight* (±10gm)
PN 221	Loop	Loop	140gm
PN 222	Loop	PN 112	300gm
PN 223	PN 112	PN 112	440gm
PN 224	Loop	PN 121	340gm
PN 225	PN 121	PN 121	540gm
PN 226N	Loop	PN 131N	620gm
PN 226(A)	Loop	PN 136	600gm
PN 227	PN 112	PN 121	540gm
PN 228N	PN 112	PN 131N	770gm
PN 228(A)	PN 112	PN 136	750gm
PN 229N	PN 121	PN 131N	830gm
PN 229(A)	PN 121	PN 136	810gm



*Mentioned weights for length 1.0m

RESTRAINT KERNMANTLE ROPE LANYARDS

EN 354:2010

- Made up of Kernmantle Rope of 11mm dia.
- They are cross stitched and protected with a strong transparent covering sleeve, which 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, which 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, indicating that the Lanyard is now unfit for further use.
- All KARAM Lanyards are also supplied with any other hook on special request.
- All Lanyards with different combinations of Karabiners mentioned below are individually certified as per EN 354:2010.



Ref.	Attachment End	Anchorage End	Weight* (±10gm)
PN 281	Loop	Loop	170gm
PN 282	Loop	PN 112	320gm
PN 283	PN 112	PN 112	480gm
PN 284	Loop	PN 121	370gm
PN 285	PN 121	PN 121	570gm
PN 286N	Loop	PN 131N	640gm
PN 286(A)	Loop	PN 136	620gm
PN 287	PN 112	PN 121	530gm
PN 288N	PN 112	PN 131N	800gm
PN 288(A)	PN 112	PN 136	800gm
PN 289N	PN 121	PN 131N	840gm
PN 289(A)	PN 121	PN 136	820gm



*Mentioned weights for length 1.0m

RESTRAINT KERNMANTLE ROPE ADJUSTABLE LANYARDS

KARAM introduces a wide range of Restraint Kernmantle Rope Adjustable Lanyards which are perfectly meant for the user who needs to change the length of his Lanyard to suit the application.

CE
EN 354:2010

- Made up of Kernmantle Rope of 11mm dia.
- **Consists of a metal adjuster to adjust the length of the Lanyard.**
- They are cross-stitched and are protected by a strong transparent covering sleeve, which not only protects the ends, but also makes the stitches visible for easy inspection before use
- The rope also has a coloured tracer strand which loses its colour in due course of time, indicating that the Lanyard is now unfit for further use.
- Maximum adjustable length up to 2.0m.
- All KARAM Lanyards are also supplied with any other hook on special request.
- All Lanyards with different combinations of Karabiners mentioned below are individually certified as per EN 354:2010.



Ref.	Attachment End	Anchorage End	Weight* (±10gm)
PN 281(AD)	Loop	Loop	320gm
PN 282(AD)	Loop	PN 112	450gm
PN 283(AD)	PN 112	PN 112	650gm
PN 284(AD)	Loop	PN 121	520gm
PN 285(AD)	PN 121	PN 121	520gm
PN 286N(AD)	Loop	PN 131N	750gm
PN 286(A)(AD)	Loop	PN 136	750gm
PN 287(AD)	PN 112	PN 121	660gm
PN 288N(AD)	PN 112	PN 131N	930gm
PN 288(A)(AD)	PN 112	PN 136	940gm
PN 289N(AD)	PN 121	PN 131N	980gm
PN 289(A)(AD)	PN 121	PN 136	980gm



*Mentioned weights for length 2.0m

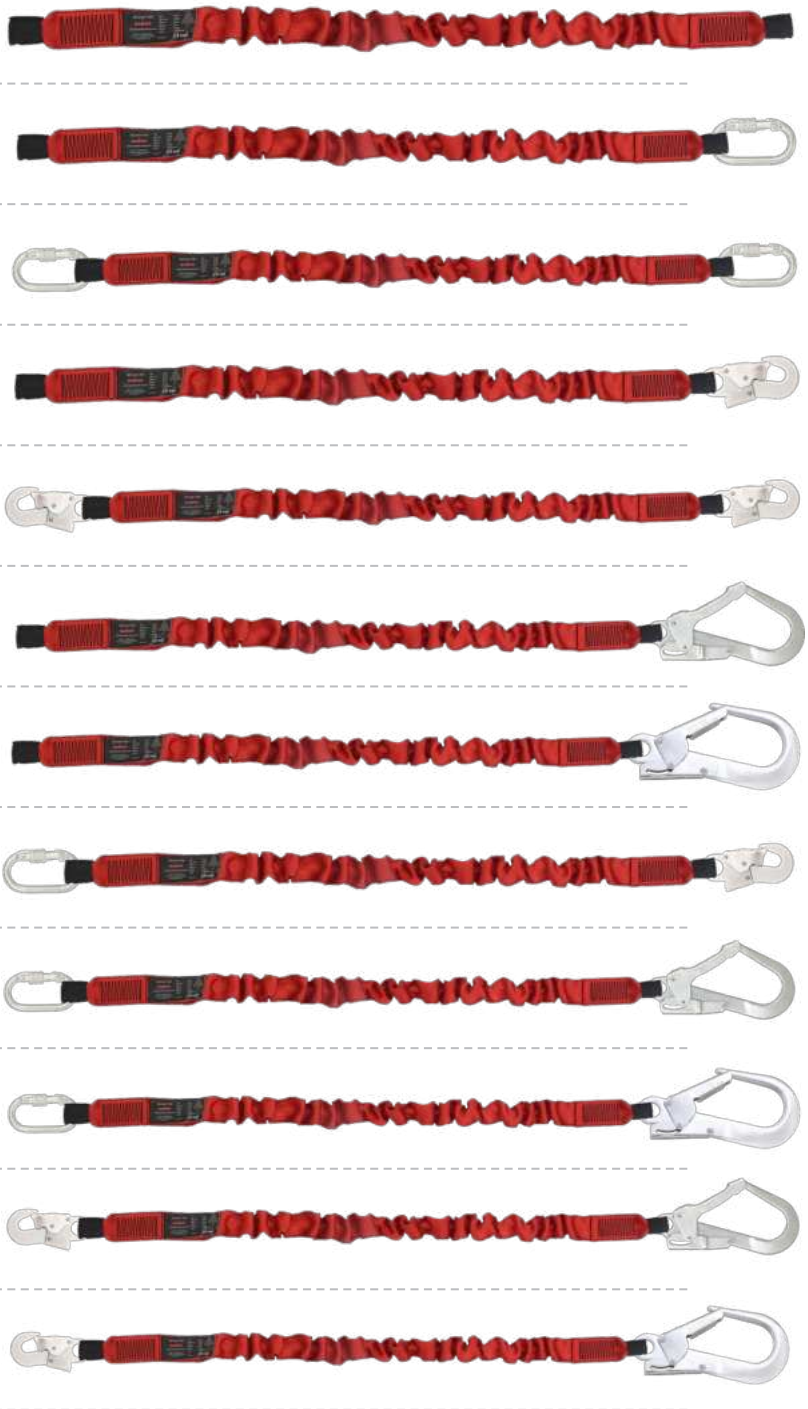
RESTRAINT EXPANDABLE LANYARDS

EN 354:2010

- **These Lanyards are ideal for use in conditions where there are chances of the user tipping over the Lanyard.**
- Made up of 44mm wide polyester tubular webbing.
- The Elastic nature of the Lanyard reduces its actual effective length thereby reducing trip hazards.
- All KARAM Lanyards are also supplied with any other hook on special request.
- Relaxed Length = 1.5m, Expanded Length = 2.0m.
- All Lanyards with different combinations of Karabiners mentioned below are individually certified as per EN 354:2010.



Ref.	Attachment End	Anchorage End	Weight* (±10gm)
PN 291	Loop	Loop	400gm
PN 292	Loop	PN 112	520gm
PN 293	PN 112	PN 112	680gm
PN 294	Loop	PN 121	580gm
PN 295	PN 121	PN 121	780gm
PN 296N	Loop	PN 131N	850gm
PN 296(A)	Loop	PN 136	850gm
PN 297	PN 112	PN 121	740gm
PN 298N	PN 112	PN 131N	1.01kg
PN 298(A)	PN 112	PN 136	990gm
PN 299N	PN 121	PN 131N	1.05kg
PN 299(A)	PN 121	PN 136	1.02kg



*Mentioned weights for length 2.0m

RESTRAINT FORKED LANYARDS

KARAM Restraint Forked Lanyards offers the facility to move in all directions while remaining safely anchored at all times. The Lanyards are suited only for purpose of restraint, and should not be used for Fall Protection since they do not have any Energy Absorber.

CE
EN 354:2010
CNB/P/11.063



Ref. PN 231N



Ref. PN 231(A)



Ref. PN 251N



Ref. PN 251(A)

Technical Snapshot					
Ref.	**Made of**	**Length**	**Dia/Width**	**Attachment Elements**	**Certified t**
PN 231N	Kernmantle Rope	1.5m, 1.8m, 2.0m	11mm	PN 112 at one end and two Steel Scaffold Hooks PN 131N at other ends.	EN 354:2010 CNB/P/11.063
PN 231(A)				PN 112 at one end and two Aluminium Rebar Hooks PN 136 at other ends.	
PN 251N	Polyamide Twisted Rope	1.5m, 1.8m, 2.0m	12mm	PN 112 at one end and two Steel Scaffold Hooks PN 131N at other ends.	
PN 251(A)				PN 112 at one end and two Aluminium Rebar Hooks PN 136 at other ends.	

EN 354:2010
CNB/P/11.063



Ref. PN 261N



Ref. PN 261(A)

Technical Snapshot					
Ref.	**Made of**	**Length**	**Dia/Width**	**Attachment Elements**	**Certified t**
PN 261N	Polyester webbing	1.5m 1.8m 2.0m	44mm	PN 112 at one end and two Steel Scaffold Hooks PN 131N at other end.	EN 354:2010 CNB/P/11.063
PN 261(A)				PN 112 at one end and two Aluminium Rebar Hooks PN 136 at other end.	

ENERGY ABSORBER

IS 3521(Part 2):2021 EN 355:2002

- The Energy Absorber consists of a special white inner polyamide webbing that absorbs the arresting forces in the event of a fall.
- The coloured webbing serves as a backup in PN 300.
- The clear protective covering helps in easy and fast visual inspection.



ENERGY ABSORBER

Ref. PN 300

- Made up of 44mm wide webbing and is shrink-wrapped.
- It reduces the impact of a fall to less than 6kN and is certified to EN 355:2002.
- The minimum fall clearance distance required when using this Energy Absorber for a 2.0m Lanyard is=6.0m.
- Openable Energy Absorber cover PR 03 is also available as an option to protect PN 300 against dirt and abrasion due to friction.



SMALL ENERGY ABSORBER

Ref. PN 400

- Smaller and lighter in weight, PN 400 is made up of 35mm wide webbing and is shrink-wrapped.
- It reduces the impact of a fall to less than 6kN and is certified to EN 355:2002.
- KARAM range of Fall Arrest Lanyards can also be provided with this Energy Absorber PN 400.
- The minimum fall clearance distance required when using this Energy Absorber for 2.0m lanyard is=5.8m.



OPENABLE ENERGY ABSORBER COVER

Ref. PR 03

Designed to protect Energy Absorber PN 300 against dirt and abrasion due to friction.

ENERGY ABSORBING TWISTED ROPE LANYARDS

- Made up of Polyamide Twisted Rope of 12mm dia.
- The spliced end is protected with a strong transparent covering sleeve, which not only protects the splicing but also makes the splicing visible for easy inspection before use.
- Loops at the end are protected by an abrasion resistant thimble, which prevents the rope from being damaged by the metallic contact of the connector.
- **The rope also has a coloured tracer strand (age indicator) which loses its colour in due course of time, to show that the Lanyard is now unfit for fu ther use.**
- Available in length 1.0m, 1.5m, 1.8m, and 2.0m.
- All KARAM Lanyards are also supplied with any other hook on special request.
- All Lanyards with different combinations of Karabiners mentioned below are individually certified as per EN 355:2002 and IS 3521(Part 2):2021.

IS 3521(Part 2):2021 EN 355:2002



Age Indicator



Ref. No. if with Energy Absorber PN 300	Ref. No. if with Energy Absorber PN 400	Attachment End	Anchorage End	Weight* (±10gm)	
PN 301	PN 301(S)	Loop	Loop	390gm	
PN 302	PN 302(S)	Loop	PN 112	540gm	
PN 303	PN 303(S)	PN 112	PN 112	690gm	
PN 304	PN 304(S)	Loop	PN 121	580gm	
PN 305	Not Applicable	PN 121	PN 121	760gm	
PN 306N	PN 306(S)N	Loop	PN 131N	860gm	
PN 306(A)	PN 306(S)(A)	Loop	PN 136	840gm	
PN 307	PN 307(S)	PN 112	PN 121	720gm	
PN 308N	PN 308(S)N	PN 112	PN 131N	990gm	
PN 308(A)	PN 308(S)(A)	PN 112	PN 136	970gm	
PN 309N	Not Applicable	PN 121	PN 131N	1.03kg	
PN309(A)	Not Applicable	PN 121	PN 136	1.01kg	
PN 310	PN 310(S)	Loop	PN 141	730gm	
PN 311	PN 311(S)	PN 112	PN 141	880gm	
PN 312	Not Applicable	PN 121	PN 141	920gm	

*Mentioned weights for length 1.0m

ENERGY ABSORBING 44MM WEBBING LANYARDS

IS 3521(Part 2):2021 EN 355:2002

- Made up of 44 mm wide polyester webbing from high tenacity polyester yarn having a different configuration of Karabiners on the ends.
- 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.
- Available in lengths 1.0m, 1.5m, 1.8m, and 2.0m.
- All KARAM Lanyards are also supplied with any other hook on special request.
- All Lanyards with different combinations of Karabiners mentioned below are individually certified as per EN 355:2002 and IS 3521(Part 2):2021



Ref. No. if with Energy Absorber PN 300	Ref. No. if with Energy Absorber PN 400	Attachment End	Anchorage End	Weight* (±10gm)
PN 321	PN 321(S)	Loop	Loop	380gm
PN 322	PN 322(S)	Loop	PN 112	540gm
PN 323	PN 323(S)	PN 112	PN 112	700gm
PN 324	PN 324(S)	Loop	PN 121	570gm
PN 325	Not Applicable	PN 121	PN 121	760gm
PN 326N	PN 326(S)N	Loop	PN 131N	860gm
PN 326(A)	PN 326(S)(A)	Loop	PN 136	840gm
PN 327	PN 327(S)	PN 112	PN 121	730gm
PN 328N	PN 328(S)N	PN 112	PN 131N	1.02kg
PN 328(A)	PN 328(S)(A)	PN 112	PN 136	1.00kg
PN 329N	Not Applicable	PN 121	PN 131N	1.04kg
PN329(A)	Not Applicable	PN 121	PN 136	1.02kg
PN 330	PN 330(S)	Loop	PN 141	730gm
PN 331	PN 331(S)	PN 112	PN 141	890gm
PN 332	Not Applicable	PN 121	PN 141	930gm



*Mentioned weights for length 1.0m

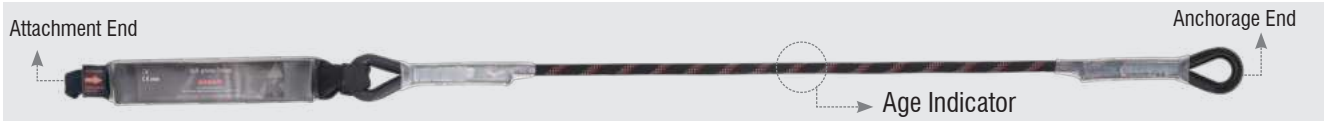
ENERGY ABSORBING KERNMANTLE ROPE LANYARDS

IS 3521(Part 2):2021 EN 355:2002

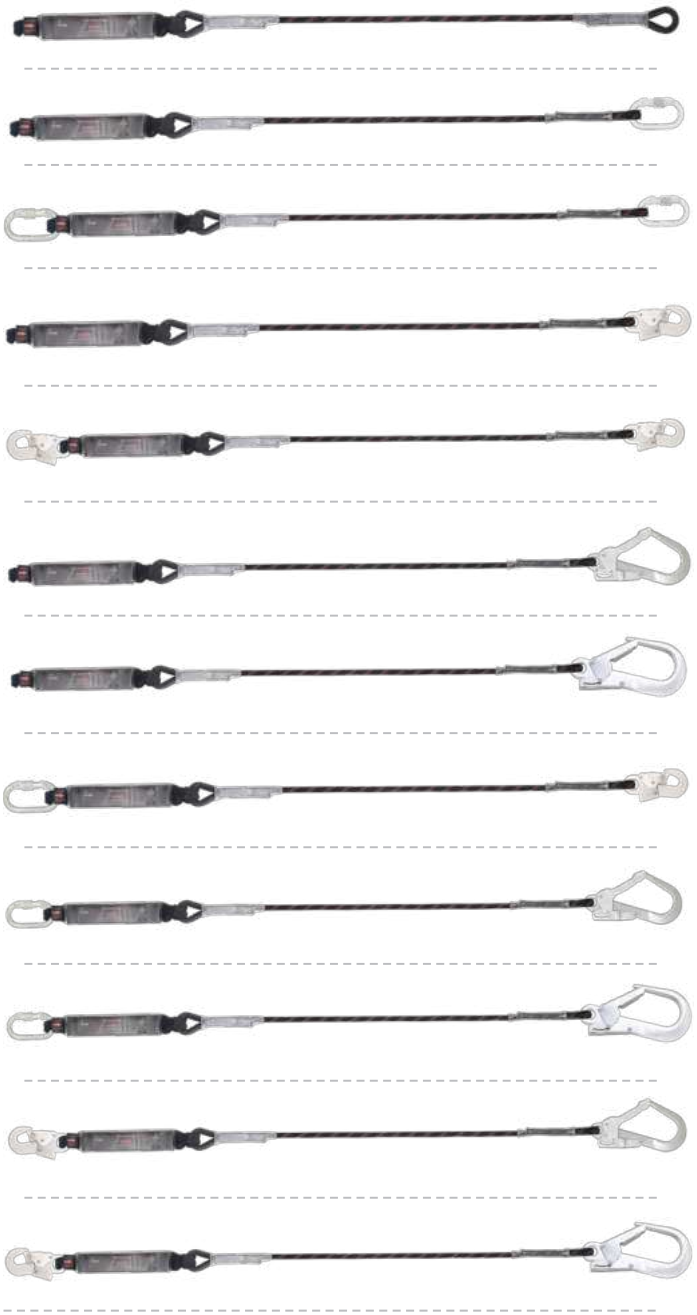
- Made from high-quality Kernmantle Rope of dia 11mm.
- They are cross-stitched and are protected with a strong transparent covering sleeve. This not only protects the ends, but also makes the stitches visible for easy inspection before use.
- The loops at the end are protected by an abrasion resistant thimble. This prevents the rope from being damaged by the metallic contact of the connector.
- **The rope also has a coloured tracer strand (age Indicator) which loses its colour in due course of time, indicating that the Lanyard is now unfit for fu ther use.**
- Available in length 1.0m, 1.5m, 1.8m, and 2.0m.
- All KARAM Lanyards are also supplied with any other hook on special request.
- All Lanyards with different combinations of Karabiners mentioned below are individually certified as per EN 355:2002 and IS 3521(Part 2):2021



Age Indicator



Ref. No. if with Energy Absorber PN 300	Ref. No. if with Energy Absorber PN 400	Attachment End	Anchorage End	Weight* (±10gm)
PN 381	PN 381(S)	Loop	Loop	420gm
PN 382	PN 382(S)	Loop	PN 112	570gm
PN 383	PN 383(S)	PN 112	PN 112	750gm
PN 384	PN 384(S)	Loop	PN 121	590gm
PN 385	Not Applicable	PN 121	PN 121	750gm
PN 386N	PN 386(S)N	Loop	PN 131N	870gm
PN 386(A)	PN 386(S)(A)	Loop	PN 136	850gm
PN 387	PN 387(S)	PN 112	PN 121	760gm
PN 388N	PN 388(S)N	PN 112	PN 131N	1.02kg
PN 388(A)	PN 388(S)(A)	PN 112	PN 136	1.04kg
PN 389N	Not Applicable	PN 121	PN 131N	1.04kg
PN389(A)	Not Applicable	PN 121	PN 136	1.06kg



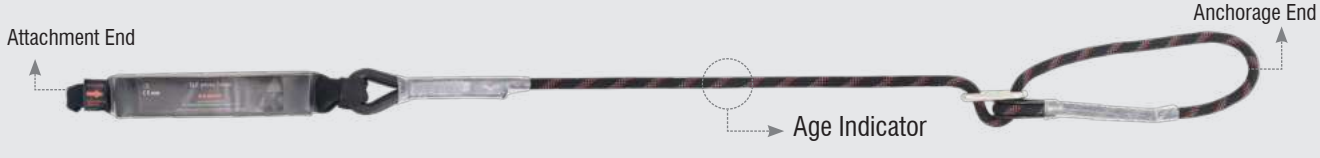
*Mentioned weights for length 1.0m

ENERGY ABSORBING KERNMANTLE ROPE ADJUSTABLE LANYARDS

IS 3521(Part 2):2021 EN 355:2002

KARAM introduces a wide range of Energy Absorbing Kernmantle Rope Adjustable Lanyards, which are perfectly meant for the user who needs to change the length of his Lanyard to suit the application.

- Made up of Kernmantle Rope of 11mm dia.
- **Consists of metal adjuster to adjust the length of the Lanyard.**
- They are cross stitched and are protected with a strong transparent covering sleeve, which not only protects the ends but also makes the stitches visible for easy inspection before use.
- Maximum adjustable length up to 2.0m.
- The rope also has a coloured tracer strand which loses its colour in due course of time, indicating that the Lanyard is now unfit for further use.
- All KARAM Lanyards are also supplied with any other hook on special request.
- All Lanyards with different combinations of Karabiners mentioned below are individually certified as per EN 355:2002 and IS 3521(Part 2):2021



Ref. No. if with Energy Absorber PN 300	Ref. No. if with Energy Absorber PN 400	Attachment End	Anchorage End	Weight* (±10gm)	
PN 381(AD)	PN 381(S)(AD)	Loop	Loop	620gm	
PN 382(AD)	PN 382(S)(AD)	Loop	PN 112	750gm	
PN 383(AD)	PN 383(S)(AD)	PN 112	PN 112	900gm	
PN 384(AD)	PN 384(S)(AD)	Loop	PN 121	800gm	
PN 385(AD)	Not Applicable	PN 121	PN 121	1.00kg	
PN 386N(AD)	PN 386(S)N(AD)	Loop	PN 131N	1.08kg	
PN 386(A)(AD)	PN 386(S)(A)(AD)	Loop	PN 136	1.08kg	
PN 387(AD)	PN 387(S)(AD)	PN 112	PN 121	960gm	
PN 388N(AD)	PN 388(S)N(AD)	PN 112	PN 131N	1.23kg	
PN 388(A)(AD)	PN 388(S)(A)(AD)	PN 112	PN 136	1.24kg	
PN 389N(AD)	Not Applicable	PN 121	PN 131N	1.28kg	
PN389(A)(AD)	Not Applicable	PN 121	PN 136	1.28kg	

*Mentioned weights for length 2.0m

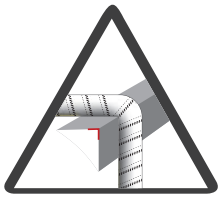
ENERGY ABSORBING KERNMANTLE EDGE SAFE LANYARDS

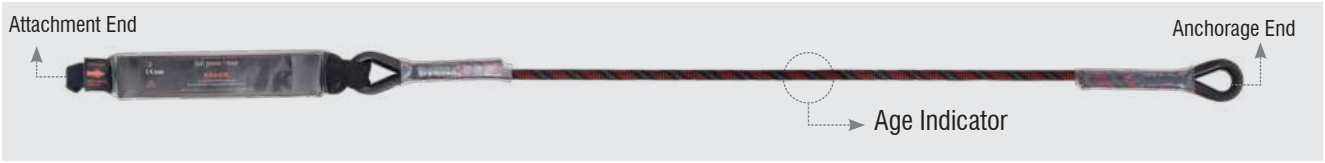
KARAM offers an exclusive Edge Safe Range of Lanyards particularly meant for protecting the user when working near SHARP EDGES especially on terrace roofs.

- Made from high-quality Kernmantle Rope of dia 11mm.
- They are cross-stitched and protected with a strong transparent covering sleeve. This not only protects the ends but also makes the stitches visible for easy inspection before 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, indicating that the Lanyard is now unfit for further use.
- Available in lengths 1.0m, 1.5m, 1.8m, and 2.0m.
- All KARAM Lanyards are also supplied with any other hook on special request.
- All Lanyards with different combinations of Karabiners mentioned below are individually certified as per EN 355:2002, IS 3521(Part 2):2021 and VG 11 RfU CNB/P/11.074.

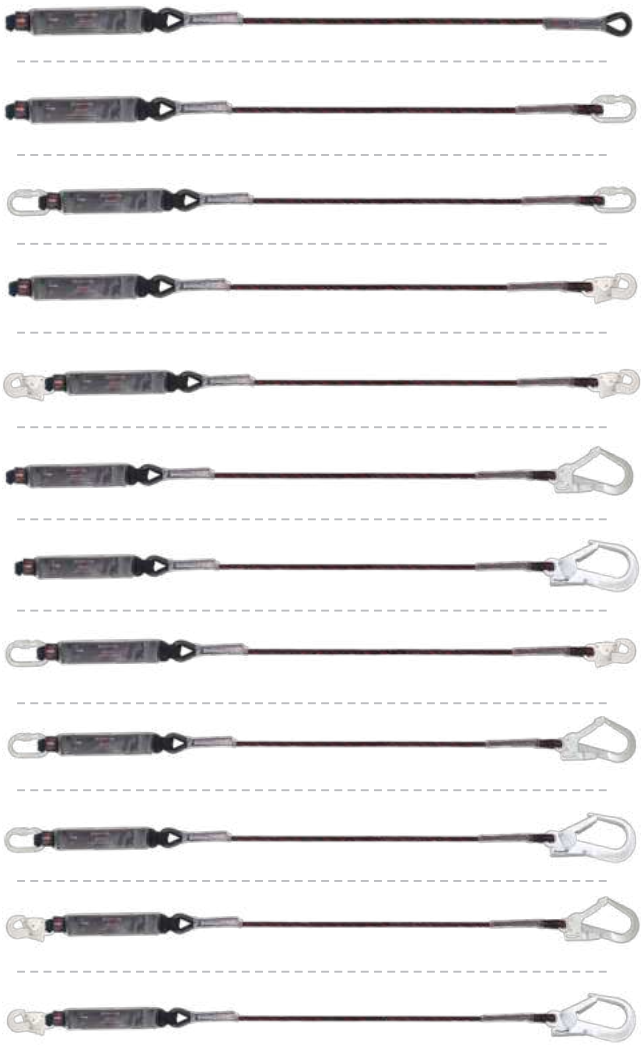
CE
EN 355:2002
VG 11 RFU CNB/P/11.074

IS 3521(Part 2):2021





Ref. No. if with Energy Absorber PN 300	Ref. No. if with Energy Absorber PN 400	Attachment End	Anchorage End	Weight* (±10gm)
PN 381(SE)	PN 381(S)(SE)	Loop	Loop	420gm
PN 382(SE)	PN 382(S)(SE)	Loop	PN 112	570gm
PN 383(SE)	PN 383(S)(SE)	PN 112	PN 112	750gm
PN 384(SE)	PN 384(S)(SE)	Loop	PN 121	590gm
PN 385(SE)	Not Applicable	PN 121	PN 121	770gm
PN 386N(SE)	PN 386N(S)(SE)	Loop	PN 131N	870gm
PN 386(A)(SE)	PN 386(A)(S)(SE)	Loop	PN 136	850gm
PN 387(SE)	PN 387(S)(SE)	PN 112	PN 121	760gm
PN 388N(SE)	PN 388N(S)(SE)	PN 112	PN 131N	1.04kg
PN 388(A)(SE)	PN 388(A)(S)(SE)	PN 112	PN 136	1.02kg
PN 389N(SE)	Not Applicable	PN 121	PN 131N	1.06kg
PN 389(A)(SE)	Not Applicable	PN 121	PN 136	1.04kg



*Mentioned weights for length 2.0m

ENERGY ABSORBING EXPANDABLE WEBBING LANYARDS

- These Lanyards are ideal for use in conditions where there chances of the user tripping over the Lanyard.
- The Elastic nature of the Lanyard reduces the actual effective length of the Lanyard thereby reducing trip hazards.
- **The Lanyards are made with 44mm wide elasticated webbing incorporated for contracting property.**
- The Loops at the ends are protected by an abrasion resistant covering. This prevents the webbing from being damaged by metallic contact of the connector.
- KARAM offers a wide range of Webbing Lanyards, having different configurations of Karabiners on the ends.
- All KARAM Lanyards are also supplied with any other hook on special request.
- Relaxed Length < 1.5m, Expanded Length = 2.0m.
- All Lanyards with different combinations of Karabiners mentioned below are individually certified as per EN 355:2002, IS 3521(Part 2):2021, VG 11/RfU CNB/P/11.062 and VG11/RfU CNB/P/11.074.

CE
EN 355:2002
VG11/RfU CNB/P/11.062
VG11/RfU CNB/P/11.074

IS 3521(Part 2):2021



Ref. No. if with Energy Absorber PN 300	Ref. No. if with Energy Absorber PN 400	Ref. No. if with 140kgs Energy Absorber PN 300(140)	Attachment End	Anchor-age End	Weight* (±10gm)	
PN 391	PN 391(S)	PN 391(140)	Loop	Loop	450gm	
PN 392	PN 392(S)	PN 392(140)	Loop	PN 112	590gm	
PN 393	PN 393(S)	PN 393(140)	PN 112	PN 112	590gm	
PN 394	PN 394(S)	PN 394(140)	Loop	PN 121	630gm	
PN 395	PN 395(S)	PN 395(140)	PN 121	PN 121	830gm	
PN 396N	PN 396N(S)	PN 396N(140)	Loop	PN 131N	910gm	
PN 396(A)	PN 396(A)(S)	PN 396(A)(140)	Loop	PN 136	910gm	
PN 397	PN 397(S)	PN 397(140)	PN 112	PN 121	790gm	
PN 398N	PN 398N(S)	PN 398N(140)	PN 112	PN 131N	1.07kg	
PN 398(A)	PN 398(A)(S)	PN 398(A)(140)	PN 112	PN 136	1.05kg	
PN 399N	NA	PN 399N(140)	PN 121	PN 131N	1.11kg	
PN 399(A)	NA	PN 399(A)(140)	PN 121	PN 136	1.09kg	

*Mentioned weights for length 2.0m

ENERGY ABSORBING EXPANDABLE WEBBING EDGE SAFE LANYARDS

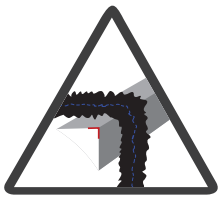
KARAM introduces an exclusive Edge Safe Range of Expandable Webbing Lanyards for reducing trip hazards and providing protection to the user when working near sharp edges.

- These Lanyards are ideal for use in conditions where there chances of the user tripping over the Lanyard. The Elastic nature of the Lanyard reduces the actual effective length of the Lanyard thereby reducing trip hazards.
- **The Lanyards are made with 44mm wide elasticated webbing incorporated for contracting property.**
- The Loops at the ends are protected by an abrasion resistant covering. This prevents the webbing from being damaged by metallic contact of the connector.
- KARAM offers a wide range of Webbing Lanyards, having different configuration of Karabiners on the ends.
- All KARAM Lanyards are also supplied with any other hook on special request.
- Relaxed Length < 1.5m, Expanded Length = 2.0m.
- All Lanyards with different combinations of Karabiners mentioned below are individually certified as per EN 355:2002, EN 354:2010, IS 3521(Part 2):2021, VG 11/RfU CNB/P/11.062 and VG 11/RfU CNB/P/11.074.

CE

EN 355:2002, EN 354:2010
VG11/RfU CNB/P/11.062
VG11/RfU CNB/P/11.074

IS 3521(Part 2):2021



Edge Tested



Ref. No. if with Energy Absorber PN 300	Ref. No. if with 140kgs Energy Absorber PN 300(140)	Attachment End	Anchorage End	Weight* (±10gm)
PN 391(SE)	PN 391(SE)(140)	Loop	Loop	450gm
PN 392(SE)	PN 392(SE)(140)	Loop	PN 112	590gm
PN 393(SE)	PN 393(SE)(140)	PN 112	PN 112	740gm
PN 394(SE)	PN 394(SE)(140)	Loop	PN 121	630gm
PN 395(SE)	PN 395(SE)(140)	PN 121	PN 121	830gm
PN 396N(SE)	PN 396N(SE)(140)	Loop	PN 131N	910gm
PN 396(A)(SE)	PN 396(A)(SE)(140)	Loop	PN 136	910gm
PN 397(SE)	PN 397(SE)(140)	PN 112	PN 121	790gm
PN 398N(SE)	PN 398N(SE)(140)	PN 112	PN 131N	1.07kg
PN 398(A)(SE)	PN 398(A)(SE)(140)	PN 112	PN 136	1.05kg
PN 399N(SE)	PN 399N(SE)(140)	PN 121	PN 131N	1.11kg
PN 399(A)(SE)	PN 399(A)(SE)(140)	PN 121	PN 136	1.09kg



*Mentioned weights for length 2.0m

INTERNAL SHOCK ABSORBING EXPANDABLE LANYARDS

- These Lanyards come with Energy Absorption feature incorporated within their core, they do not require any additional Energy Absorber Pack; hence, they are lighter in weight.
- These Lanyards are ideal for use in conditions where there are chances of the user tripping over the Lanyard. The Elastic nature of the Lanyard reduces the actual effective length of the Lanyard thereby reducing trip hazards.
- KARAM offers a wide range of Internal Shock Absorbing Expandable Lanyards, having different configurations of Karabiners on the ends.
- All KARAM Lanyards are also supplied with any other hook on special request.
- Relaxed Length =1.4m to 1.6m, Expanded Length = 2.0m.
- All Lanyards with different combinations of Karabiners mentioned below are individually certified as per EN 355:2002, EN 354:2010 and VG 11 RfU CNB/P/11.062.

CE

EN 355:2002
EN 354:2010
VG 11 RFU CNB/P/11.062



Ref.	Attachment End	Anchorage End	Weight* (±10gm)
PN 391(IS)	Loop	Loop	270gm
PN 392(IS)	Loop	Ref. PN 112	410gm
PN 393(IS)	Ref. PN 112	Ref. PN 112	570gm
PN 394(IS)	Loop	Ref. PN 121	450gm
PN 395(IS)	Ref. PN 121	Ref. PN 121	650gm
PN 396N(IS)	Loop	Ref. PN 131N	700gm
PN 396(A)(IS)	Loop	Ref. PN 136	720gm
PN 397(IS)	Ref. PN 112	Ref. PN 121	610gm
PN 398N(IS)	Ref. PN 112	Ref. PN 131N	1.01kg
PN 398(A)(IS)	Ref. PN 112	Ref. PN 136	1.01kg
PN 399N(IS)	Ref. PN 121	Ref. PN 131N	1.15kg
PN 399(A)(IS)	Ref. PN 121	Ref. PN 136	1.15kg



*Mentioned weights for length 2.0m

FORKED LANYARDS WITH ENERGY ABSORBER

KARAM Forked Lanyards come in Twisted Ropes, Kernmantle Ropes and in 44mm wide polyester webbing. These Lanyards offer the facility to move in all directions while remaining safely anchored at all times.

IS 3521(Part 2):2021 EN 355:2002
VG11/RfU CNB/P/11.063



Ref. PN 341N



Ref. PN 341(A)



Ref. PN 341N(AD)



Ref. PN 341(A)(AD)



Ref. PN 351N



Ref. PN 351(A)



Ref. PN 352



Ref. PN 361N



Ref. PN 361(A)

Technical Snapshot					
Ref.	**Made of**	**Length**	**Dia/ Width**	**Attachment Elements**	**Certified t**
PN 341N	Kernmantle Rope	1.5m 1.8m 2.0m	11mm	PN 112 with Energy Absorber PN 300 at one end and two Steel Scaffold Hooks PN 131N at other ends.	EN 355:2002 VG11 RfU CNB/P/11.063 (additional Static Strength Test) IS 3521(Part 2):2021
PN 341(A)				PN 112 with Energy Absorber PN 300 at one end and two Aluminium Hooks PN 136 at other ends.	
PN 341N(AD)				PN 112 with Energy Absorber PN 300 at one end and two Steel Scaffold Hooks PN 131N at other ends.	
PN 341(A)(AD)				PN 112 with Energy Absorber PN 300 at one end and two Aluminium Hooks PN 136 at other ends.	
PN 351N	Twisted Polyamide Rope		12mm	PN 112 with Energy Absorber PN 300 at one end and two Steel Scaffold Hooks PN 131N at other ends.	
PN 351(A)				PN 112 with Energy Absorber PN 300 at one end and two Aluminium Hooks PN 136 at other ends.	
PN 352				PN 112 with Energy Absorber PN 300 at one end and two Steel Snap Hooks PN 121 at other ends.	
PN 361N	Wide Polyester Webbing		44mm	PN 112 with Energy Absorber PN 300 at one end and two Steel Scaffold Hooks PN 131N at other ends.	
PN 361(A)				PN 112 with Energy Absorber PN 300 at one end and two Aluminium Hooks PN 136 at other ends.	

FORKED LANYARDS WITH ENERGY ABSORBER

IS 3521(Part 2):2021 EN 355:2002
VG11/RfU CNB/P/11.062
VG11/RfU CNB/P/11.063

These Lanyards reduce trip hazards and provide the facilitiy to move in all directions while safely remaining anchored at all times.



Ref. PN 371N



Ref. PN 371(A)

Technical Snapshot						
Ref. No. if with Energy Absorber PN 300	**Ref. No. if with 140kgs Energy Absorber PN 300(140)**	**Made of**	**Length**	**Dia/ Width**	**Attachment Elements**	**Certified t**
PN 371N	**PN 371N(140)**	Tubular Webbing	**Relaxed Length :** 1.4m to 1.6m **Expended Length :**2.0m	44mm	PN 112 with Energy Absorber PN 300 at one end and two Steel Scaffold Hooks PN 131N at other ends.	EN 355:2002 VG11/RfU CNB/P/11.062 VG11/RfU CNB/P/11.063 (additional Static Strength Test) IS 3521(Part 2):2021
PN 371(A)	**PN 371(A)(140)**				PN 112 with Energy Absorber PN 300 at one end and two Aluminium Hooks PN 136 at other ends.	EN 355:2002 VG11/RfU CNB/P/11.062 VG11/RfU CNB/P/11.063 IS 3521(Part 2):2021

SHARP EDGE TESTED FORKED LANYARDS

KARAM INTRODUCES Edge Safe Tested Forked Lanyards specifically meant for users working on sharp edges. These Lanyards offer the facility to move in all directions while remaining safely anchored at all times.

IS 3521(Part 2):2021

EN 355:2002
VG11/RfU CNB/P/11.063
VG11 RFU CNB/P/11.074



Ref. PN 341N(SE)



Ref. PN 341(A)(SE)

Technical Snapshot					
Ref.	**Made of**	**Length**	**Dia/ Width**	**Attachment Elements**	**Certified t**
PN 341N(SE)	Kernmantle Rope	1.5m 1.8m 2.0m	11mm	PN 112 with Energy Absorber PN 300 at one end and two Steel Scaffold Hooks PN 131N at other ends.	EN 355:2002 +VG11 RfU CNB/P/11.063 (additional Static Strength Test) +VG11 RfU CNB/P/11.074 IS 3521(Part 2):2021
PN 341(A)(SE)				PN 112 with Energy Absorber PN 300 at one end and two Aluminium Hooks PN 136 at other ends.	

IS 3521(Part 2):2021

EN 355:2002
EN 354:2010
VG 11 RFU CNB/P/11.062
VG 11 RFU CNB/P/11.063
VG 11 RFU CNB/P/11.074



Ref. PN 371N(SE)140

140 kg



Ref. PN 371(A)(SE)140

140 kg

Technical Snapshot						
Ref. No. if with Energy Absorber PN 300	**Ref. No. if with 140kgs Energy Absorber PN 300(140)**	**Made of**	**Length**	**Dia/ Width**	**Attachment Elements**	**Certified t**
PN 371N(SE)	**PN 371N(SE)140**	Tubular Webbing	Relaxed Length: 1.4m - 1.6m Expanded Length: 2.0m	44mm	PN 112 at one end and two Steel Scaffold Hooks PN 131N at other ends.	EN 355:2002 EN 354: 2010 VG11 RfU CNB/P/11.062 VG11 RfU CNB/P/11.063 VG11 RfU CNB/P/11.074 IS 3521(Part 2):2021
PN 371(A)(SE)	**PN 371(A)(SE)140**				PN 112 at one end and two Aluminium Rebar Hooks PN 136 at other ends.	

EXPANDABLE INTERNAL SHOCK ABSORBING TWIN LANYARDS

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

CE
EN 355:2002
EN 354:2010
VG 11 RfU CNB/P/11.063

IS 3521(Part 2):2021



Ref. PN 371N(IS) 140 kg



Ref. PN 371(A)(IS) 140 kg

Technical Snapshot					
Ref.	**Made of**	**Length**	**Dia/ Width**	**Attachment Elements**	**Certified t**
PN 371N(IS)	Tubular Webbing	Relaxed Length: 1.4m - 1.6m Expanded Length: 2.0m	44mm	PN 112 at one end and two Steel Scaffold Hooks PN 131N at other ends.	EN 355:2002 EN 354: 2010 VG 11 RfU CNB/P/11.063 IS 3521(Part 2):2021
PN 371(A)(IS)				PN 112 at one end and two Aluminium Rebar Hooks PN 136 at other ends.	

ABOUT VG11 STANDARD

The PPE standards are governed by the Regulation (EU) 2016/425 on Personal Protective Equipment (PPE). The standards are formulated by the PPE experts working group of the PPE Regulation. This PPE experts working group comprises of representation from the industry who use the product, the manufacturer, the notified body who test the products and awards the CE License. Europe is formed by many countries called the member states and the expert group has representation from there as well. A horizontal committee ensures that the standards are assessed periodically for upgradation. **Under the horizontal committee are vertical groups which handles specific categories of PPE and provides solutions on technical issues and prepares 'Recommendations for Use' sheets which are also called VG11 Sheets. These sheets answer the technical queries which are not provided in the product standards.**



ANCHORAGES

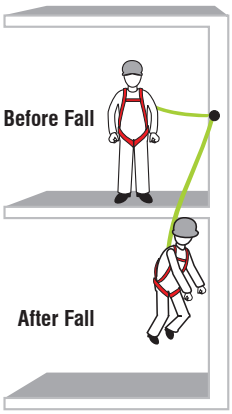


KARAM offers a range of Anchorage devices in Webbing, Steel Rope and Metal, which can be easily installed over a variety of structures to provide safe anchorage points for working at heights where needed. All these Anchorages comply with the latest European Standard EN 795:2012 and IS 3521(Part 7):2021.

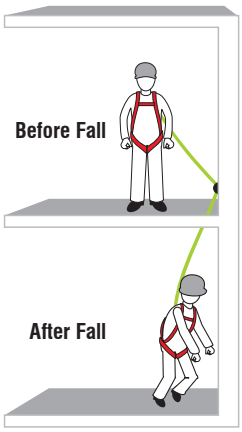
Points to consider when anchoring yourself to any Anchorage Point

1 Always make sure that the Anchorage used (whether a scaffolding bar, or the bar of a ladder, or an Anchorage Connector) is strong enough to hold you in case you are subjected to a fall. Technically, it should be capable of withstanding a static load of more than **12 kN for 3 minutes.**

2 You should Anchor yourself to the point which lies either to your shoulder level, or higher than that. If the Anchorage point is below this, then the distance of the fall gets increased, thereby exposing you to risk.

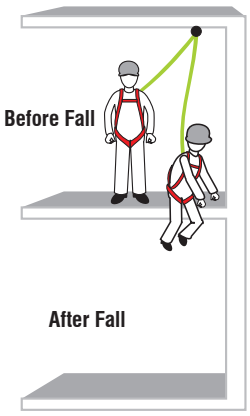


Fall when anchored on the side (Fall Factor 1)

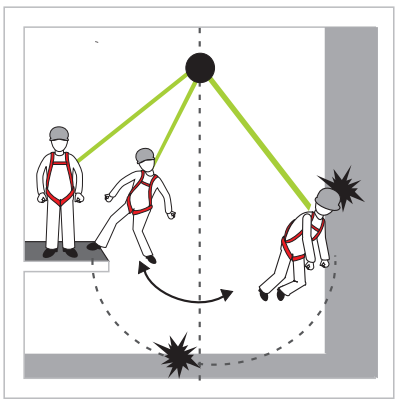


Fall when anchored at lower level (Fall Factor 2)

3 Try to Anchor yourself to a point that is more vertically above than to your side. If the Anchorage is on the side, you may experience a risky swing fall in the event of a fall, and may injure yourself by hitting an obstacle.

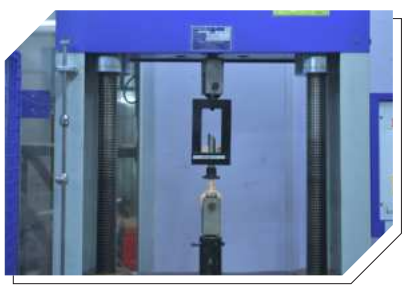


Fall when anchored at a level above the head (Fall Factor 0)


You could be injured if anchored on the side, due to the pendulum effect.

Testing


DYNAMIC STRENGTH TEST TYPE A ANCHOR


STATIC TEST OF TYPE B ANCHOR

TESTED & CERTIFIED

ANSI CE 0598

IS 3521(Part 7):2021
CM/L 8300149309

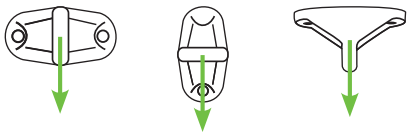
According to EN 795:2012, Anchor devices have been classified into various types Type A, B, C, D and E. KARAM offers a range of Anchor devices which fall under various such types.

TYPE A ANCHOR (AS PER EN 795:2012)

This type is an Anchor device with one or more stationary anchor points that require a structural anchor or fixing element to be fixed to the structure. This type of anchor is usually small, and may or may not be removed from the supporting structure due to being fixed, such as with rivets, studs, screws, welds or resin bonding.

***Scan here** for a virtual tour of the product*





Tested to withstand load from all the 3-axes

ALUMINIUM POINT ANCHOR

Ref. SA 09

- Compact and highly corrosion resistant.
- Can be bolted on any structure with the help of 2 screw-bolts.
- Tested to withstand the impact load in all the 3 axes, providing the highest level of safety.
- It can be bolted on concrete structures that have a minimum width of 125mm and metal structures using suitable fasteners.

CONFORMS TO

- **EN 795:2012 Type A**
- **ANSI Z359.1-2007**
- **TS16415:2013 Type A (for upto 3 users)**

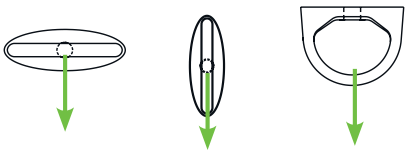
CERTIFIED TO

- **IS 3521(Part 7):2021**

IS 3521(Part 7):2021 ANSI Z359.1-2007

***Scan here** for a virtual tour of the product*





Tested to withstand load from all the 3-axes

STEEL POINT ANCHOR

Ref. SA 10

A forged Steel Point Anchor designed to be fixed on walls, ceiling, roof-tops, and steel structures.

CONFORMS TO

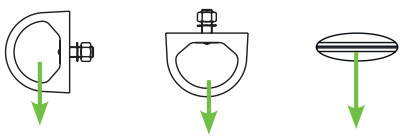
- **EN 795:2012 Type A**
- **TS 16415:2013 Type A (for up to 4 users)**
- **ANSI Z359.18:2017 Type A**

CERTIFIED TO

- **AS/NZS 5532:2013**
- **IS 3521(Part 7):2021**

IS 3521(Part 7):2021 AS/NZS 5532:2013 ANSI Z359.18:2017 Type A





Tested to withstand load from all the 3-axes

STEEL POINT ANCHOR

Ref. SA 10A

This forged Steel Anchorage Point is another device that can be bolted on any structure without the help of any additional fastener. Special lengths of studs can also be provided on request.

CONFORMS TO

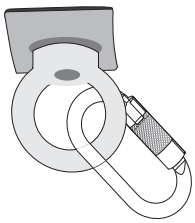
- **EN 795:2012 Type A**
- **TS 16415:2013 Type A (for up to 4 users)**

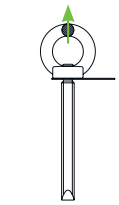
CERTIFIED TO

- **AS/NZS 5532:2013**
- **IS 3521(Part 7):2021**

IS 3521(Part 7):2021 AS/NZS 5532:2013

Scan here for a virtual tour of the product







STAINLESS STEEL CHEMICAL POINT ANCHOR

Ref. SA 12

- For fastening into concrete.
- Is used with adhesive capsule 10 HVU M12 x 110 code: 256693.
- Drilling dia recommended for installation - 14mm and depth-110mm.

CONFORMS TO

EN 795:2012 Type A

CERTIFIED TO

- **AS/NZS 5532:2013**
- **IS 3521(Part 7):2021**

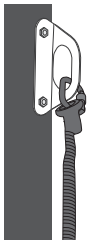
IS 3521(Part 7):2021 AS/NZS 5532:2013

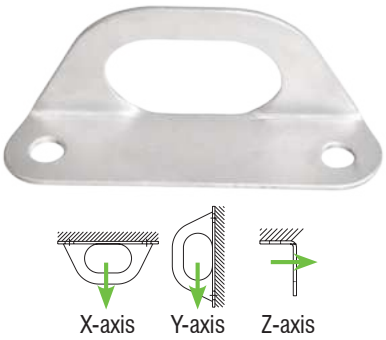
Technical Snapshot

Ref.	Material	Minimum Breaking Strength	Finish	Net Weight
SA 09	Aluminium Alloy	23kN	Natural Silver / Colored Anodized	308.0gm
SA 10	Alloy Steel		Natural Silver	380.0gm
SA 10A	Alloy Steel			435.0gm
SA 12	Stainless Steel	12kN	Polished	300.0gm ± 10.0gm

FLANGE ANCHORS

KARAM introduces the Flange Anchors, specifically designed to be fixed on walls, ceilings, roof tops or steel structures.





Ref. SA 41

The Anchorage provided by its eye-bolt has been tested to withstand the required load of 23kN from all the 3 axes, thus providing the highest level of safety.

CONFORMS TO

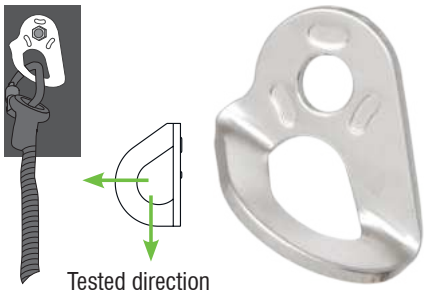
EN 795:2012 Type A

CERTIFIED TO

- **AS/NZS 5532:2013**
- **IS 3521(Part 7):2021**

IS 3521(Part 7):2021 AS/NZS 5532:2013

Scan here for a virtual tour of the product



Ref. SA 42-12

Can be used with chemical as well as in mechanical nut bolt fastener in predefined hole of dia 14mm through a drilling depth of 95mm.

CONFORMS TO

- **EN 795:2012 Type A**
- **ANSI Z359.18-2017**
- **TS 16415:2013**
  (for upto 2 users)

CERTIFIED TO

- **AS/NZS 5532:2013**
- **IS 3521(Part 7):2021**

IS 3521(Part 7):2021 ANSI Z359.1-2007 AS/NZS 5532:2013

Ref.	Material	Minimum Breaking Strength	Finish	Process	Net Weight
SA 41	Stainless Steel	23kN	Polished	Stamped	311.0gm ± 10.0gm
SA 42-12		12kN			60.0gm ± 5.0gm

TYPE B ANCHOR (AS PER EN 795:2012)

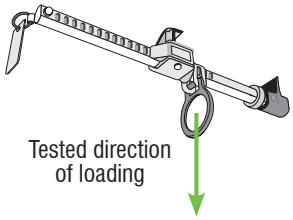
This type is an Anchor device, with one or more stationary Anchor points, which does not require a fixing element to be fixed to the structure. They are designed to be easily transported, as they normally require minimal installation or can be dismantled and moved quickly.



BEAM ANCHOR
Ref. SA 08



Scan here for a virtual tour of the product



Tested direction of loading

BEAM ANCHOR
Ref. SA 08M

GENERAL FEATURES

- Is a temporary transportable Anchor device, which provides an Anchorage Point while being attached safely onto a beam, without penetrating it.
- The Beam Anchor arm has flanges made of brass, and is adjustable to suit different beam sizes.
- Once installed, the D-ring on the aluminum bar of the Beam Anchor can be used for connection with a variety of connectors for suitable Anchorage.

SA 08 AND SA 08M CERTIFIED TO

- EN 795:2012 Type B and ATEX 2014/34/EU
- IS 3521(Part 7):2021
- SA 08 is also certified to AS/NZS 5532:2013

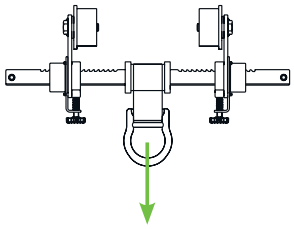
SA 08 AND SA 08M CONFORMS TO

- **ANSI Z359.18-2017 Type A**

IS 3521(Part 7):2021 | AS/NZS 5532:2013 | ATEX 2014/34/EU | ANSI Z359.18-2017 Type A | EN 795:2012 Type B



Scan here for a virtual tour of the product



Tested direction of loading



BEAM ANCHOR TROLLEY
Ref. SA 15

BEAM ANCHOR TROLLEY
Ref. SA 15A

GENERAL FEATURES

- Provides a movable Anchorage Point using the length of the beam to which it is mounted, to move along with the user.
- Highly corrosion resistant and easy to install.
- Comes with adjustable flanges for use on different beam sizes.
- This trolley allows continuous safe Anchorage by allowing the Anchor Point to travel across the length of the beam, along with the user.
- The wheels of the trolley provide extremely smooth movement along the beam over which it is mounted.

SA 15 AND SA 15A CERTIFIED TO

- EN 795:2012 Type B, IS 3521(Part 7):2021
- SA 15 is also certified to AS/NZS 5532:2013 and ATEX 2014/34/EU

CONFORMS TO

ANSI Z359.18-2017 Type A

IS 3521(Part 7):2021 | AS/NZS 5532:2013 | ATEX 2014/34/EU | ANSI Z359.18-2017 Type A | EN 795:2012 Type B



Consists of electrically insulated rollers for safe working in conditions where there are chances of possible electrical hazards.
Minimum di-electric resistance: 30kV

DI-ELECTRIC BEAM ANCHOR TROLLEY

Ref. SA 15B

GENERAL FEATURES

- Provides a movable Anchorage Point using the length of the beam to which it is mounted, to move along with the user.
- Highly corrosion resistant and easy to install.
- Comes with adjustable flanges for use on different beam sizes
- This trolley provides continuous safe anchorage by allowing the Anchor Point to travel across the length of the beam, along with the user.
- The wheels of the Trolley provide extremely smooth movement along the beam over which it is mounted.

CONFORMS TO

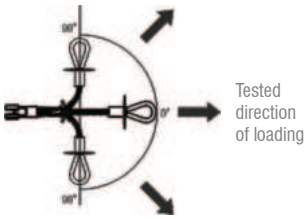
ANSI Z 359.18:2007 Type A

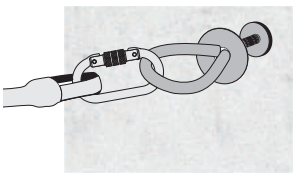
CERTIFIED TO

- EN 795:2012 Type B
- IS 3521(Part 7):2021

IS 3521(Part 7):2021 ANSI Z 359.18:2007 EN 795:2012 Type B

Technical Snapshot				
Ref.	**Material**	**Minimum Breaking Strength**	**Flange Width**	**Weight**
SA 08	Aluminum Alloy and Brass	23kN	90mm to 340mm	1.87kg ± 0.01kg
SA 08M			75mm to 150mm	1.56kg ± 0.01kg
SA 15	Aluminum and Stainless steel		80mm to 250mm	4.20kg ± 0.01kg
SA 15A				3.90kg ± 0.01kg
SA 15B				3.70kg ± 0.01kg







***Scan here** for a virtual tour of the product*

CONCRETE ANCHOR

Ref. SA 16

GENERAL FEATURES

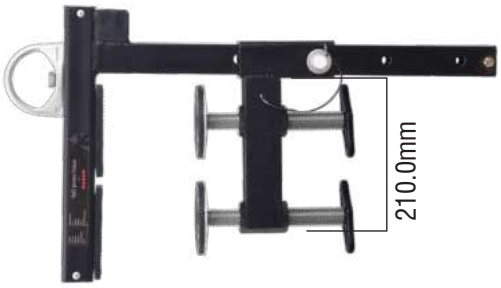
- Extremely easy to install using a single hand without the help of any tools or fasteners through a pre-defined hole of dia 19mm through a drilling depth of 110mm
- The flanges are pulled in when the eye of the anchor is pulled allowing the anchor to pass through the hole. When the eye is released, these flanges fan out along the outer part of the concrete wall, and hold the anchor in its place

CERTIFIED TO

EN 795:2012 Type B, AS/NZS 5532:2013
ATEX 2014/34/EU, IS 3521(Part 7):2021

IS 3521(Part 7):2021 ATEX 2014/34/EU AS/NZS 5532:2013 EN 795:2012 Type B

Technical Snapshot			
Ref.	**Material**	**Minimum Breaking Strength**	**Weight**
SA 16	Galvanized wire rope of dia 6.0mm	12kN	150gm ± 10gm



PARAPET ANCHOR

Ref. SA 11



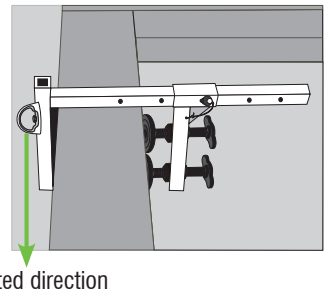
Scan here for a virtual tour of the product

PARAPET ANCHOR WITH EXTENDED MOVABLE ARM

Ref. SA 11B

GENERAL FEATURES

- Provides a safe Anchorage Point on Parapets and facades for use on various structures.
- The soft part on the inner side of the adjustable flanges also ensures that the parapet is not damaged.
- **Ref. SA 11B** consists of extended movable arm which allows installation on the Parapet with mounting on outer edge.



Tested direction of loading

CERTIFIED TO

- EN 795:2012 Type B
- IS 3521(Part 7):2021

CONFORMS TO

ANSI Z359.18-2017 Type A

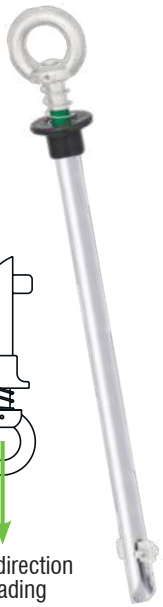
IS 3521(Part 7):2021 ANSI Z359.18-2017 Type A EN 795:2012 Type B

Technical Snapshot				
Ref.	**Material**	**Minimum Breaking Strength**	**Flange Width**	**Weight**
SA 11	Alloy Steel with ED coated Black	23kN	60mm to 360mm	9.0kg ± 0.1kg
SA 11B				9.56kg ± 0.1kg

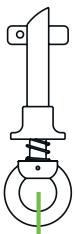
GIRDER AND CONCRETE STEEL ANCHOR

Ref. SA 13 Ref. SA 13A





Scan here for a virtual tour of the product



Tested direction of loading





GENERAL FEATURES

- Girder Anchor SA 13 can be installed on a steel structure whereas Concrete Steel Anchor SA 13A can be installed on steel structure and concrete wall. Both these Point Anchors can be installed easily with one hand without the use of any tools and fasteners.
- Both SA 13 and SA 13A are provided with green indicator bands which become visible when the installation is complete to indicate fool-proof safety.

SA 13 AND SA 13A CERTIFIED TO

- EN 795:2012 Type B, IS 3521(Part 7):2021
- SA 13 also certified to AS/NZS 5532:2013 and ATEX 2014/34/EU

SA 13 AND SA 13A CONFORMS TO

ANSI Z359.18-2017 Type A

IS 3521(Part 7):2021 ATEX 2014/34/EU AS/NZS 5532:2013 ANSI Z359.18-2017 Type A EN 795:2012 Type B

Technical Snapshot					
Ref.	**Material**	**Minimum Breaking Strength**	**Preformed Hole of Dia**	**Thickness of Structure**	**Weight**
SA 13	Stainless Steel and Alloy Steel	23 kN	21mm to 30mm	upto 40mm	550gms ± 10gm
SA 13A				upto 340mm	1.25kg ± 0.01kg



***Scan here** for a virtual tour of the product*



Tested direction of loading

EDGE ANCHOR

Ref. SA 20

Introducing the uniquely designed KARAM Edge Anchor, which allows multi-depth adjustment to suit varying roof cladding profiles.

GENERAL FEATURES

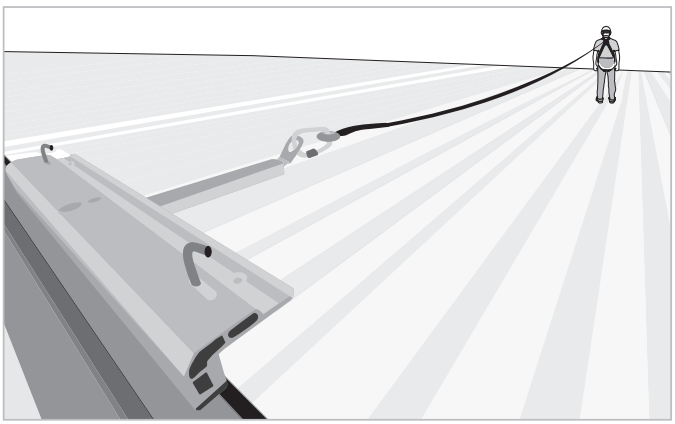
- Designed for a single user only, this Edge Anchor is robust, light in weight, collapsible and portable for easy transport, storage and usage.
- With an energy absorbing arm with fall indicator, it provides additional safety to the user while working.

CERTIFIED TO

- EN 795:2012 Type B
- AS/NZS 5532:2013
- IS 3521(Part 7):2021

IS 3521(Part 7):2021 AS/NZS 5532:2013 EN 795:2012 Type B

Technical Snapshot				
Ref.	**Material**	**Minimum Breaking Strength**	**Range of Cladding Profil**	**Weight**
SA 20	Aluminum Alloy	15kN	Upto 30mm	3.0kg ± 0.1kg



CONTAINER ANCHOR POST

Container Anchor post designed by KARAM is meant to provide a temporary anchor for working on top of 20ft and 40ft shipping containers.

IS 3521(Part 7):2021 EN 795:2012 Type B

Ref. SA 48 Ref. SA 48(SW)



Scan here for a virtual tour of the product

GENERAL FEATURES

- In addition to its use as a stand alone anchor post, Container Anchor Post can also be used to form a Horizontal Lifeline over the top of container depending upon the requirement of work to be done.
- Comes with a side lock and tag line arrangement for easy and secure installation by one person only.
- Consists of a side handle with a special grip for easy carrying and safe transportation.
- Can be easily removed without damaging the container.
- SA 48 is compatible with KARAM Horizontal Lifelines PN 3000, PN 3001 and PN 3002.
- Has four holes on the anchor plate, which can be used for making connections as anchor points.
- SA 48(SW) consists of one swivel eye for anchorage / making connections.

CERTIFIED TO

- EN 795:2012 Type B
- IS 3521(Part 7):2021

Technical Snapshot					
Ref.	**Material**	**Minimum Breaking Strength**	**Weight**	**Weight**	**Certified t**
SA 48	Alloy steel	15kN	ED coated (Black)	15.83 kgs	EN 795:2012 Type B
SA 48(SW)				14.53 kgs	EN 795:2012 Type B IS 3521(Part 7):2021

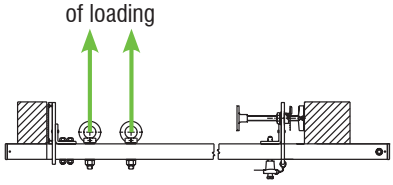
DOOR AND WINDOW ANCHORAGES

Ref. PN 802

IS 3521(Part 7):2021 EN 795:2012 Type B
TS 16415:2013 Type B (for up to 2 users)



Tested direction of loading



Scan here for a virtual tour of the product

GENERAL FEATURES

- Provides a non-penetrating Anchor Point that can be installed by just compressing it against the door or window frame, jamming itself between the two vertical sides.
- Light in weight, easy to store and easy to install without any tools or drilling.
- Arms of the Door Anchor are adjustable, enabling installation on door/window frames of width from 60 cm to 125 cm.
- Is provided with two separate eye bolts, enabling anchorage by two personnel at the same time.
- Certified for 2 users.
- Is provided with door anchor bag Ref. BG 34

CERTIFIED TO

- EN 795:2012 Type B, IS 3521(Part 7):2021
- TS 16415:2013 Type B (for upto 2 users)

Technical Snapshot			
Ref.	**Material**	**Minimum Breaking Strength**	**Weight**
PN 802	Aluminium Alloy	15kN	4.85 kg

CROSS ARM AND CONCRETE ANCHOR STRAPS

KARAM provides a wide range of Cross Arm and Concrete Anchor Straps of various configurations and lengths that can be altered as per the requirement.

IS 3521(Part 7):2021 AS/NZS 5532:2013 EN 795:2012 Type B



CROSS ARM STRAP
Ref. PN 803



CROSS ARM STRAP
Ref. PN 804



CROSS ARM STRAP
Ref. PN 805



CROSS ARM STRAP
Ref. PN 806



CROSS ARM STRAP
Ref. PN 807



CROSS ARM STRAP
Ref. PN 807(20)



CROSS ARM STRAP
Ref. PN 808



CONCRETE ANCHOR STRAP
Ref. PN 809

Technical Snapshot					
Ref.	**Material**	**Length**	**Minimum Breaking Strength**	**Attachments**	**Certified t**
PN 803	44 mm wide Polyester webbing	1.2m or as requested	18kN for 3 minutes	D-Ring at one end and textile loop at the other end	EN 795:2012 Type B AS/NZS 5532:2013 IS 3521(Part 7):2021
PN 804		1m, 1.5m and 2m or as requested		Has a D-Ring on both the ends	EN 795:2012 Type B AS/NZS 5532:2013 EN 566:2017 IS 3521(Part 7):2021
PN 805		1.07m or as requested		D-Ring at one end and textile loop at the other end. Provided with a polyester covering on the load-bearing face of the webbing, for abrasion resistance.	EN 795:2012 Type B AS/NZS 5532:2013 IS 3521(Part 7):2021
PN 806		1.0m, 1.5m and 2.0m or as requested		Small D-ring on one end and a bigger D-ring on the other.	
PN 807	25 mm wide Polyester webbing	0.6m, 1.0m, 1.5m or as requested		NA	EN 795:2012 Type B AS/NZS 5532:2013 EN 566:2017 IS 3521(Part 7):2021
PN 807(20)	20 mm wide Polyester webbing				
PN 808	44 mm wide Polyester webbing	0.5m or as requested		Loops at both the ends	
PN 809	50 mm wide Polyester webbing	1.0m, 1.5m and 2.0m or as requested			

ANCHORAGE WIRE ROPE SLINGS

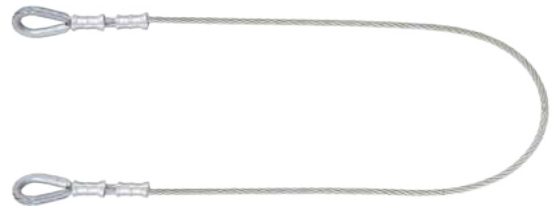
Anchorage Wire Rope Slings are highly resistant to wear and can be used around edged structures.



ANCHORAGE STEEL WIRE ROPE SLING

Ref. PN 813

IS 3521(Part 7):2021 ATEX 2014/34/EU EN 795:2012 Type B



ANCHORAGE STAINLESS STEEL WIRE ROPE SLING

Ref. PN 814

IS 3521(Part 7):2021 EN 354:2010 EN 795:2012 Type B

Technical Snapshot					
Ref.	**Material**	**Length**	**Minimum Breaking Strength**	**Attachments**	**Certified t**
PN 813	PVC coated G.I wire rope of dia 8.0mm	1.0m, 1.5m, 1.8m and 2.0m or as requested	23kN	Steel thimbles at both the ends.	EN 795:2012 Type B ATEX 2014/34/EU IS 3521(Part 7):2021
PN 814	Stainless steel wire rope of dia 8.0mm				EN 354:2010 EN 795:2012 Type B IS 3521(Part 7):2021

TELESCOPIC POLE SYSTEM

Ref. PN 815

Telescopic Pole is a perfect solution to create overhead anchors at unreachable heights. It is light in weight, made up of fibre glass, and can be effectively used to install an anchorage point from a distance.

- The total weight of the Telescopic Pole assembly without the hook is approx. 4.6kg, hence can be easily carried.
- Working reach with extension: 10.5m and without extension: 9.5m.
- Dielectric resistance: 30kV
- Comes with an option of using either the steel anchorage hook PN 156, or the Aluminum Anchorage Hook PN 154, to anchor at the required distance.

HEAD

Ref. PN 815(01)

- Length: 240.0mm
- Weight: 185gms

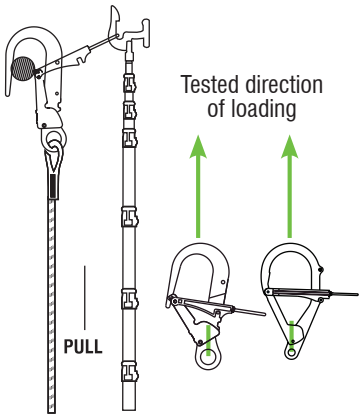


EXTENSION SECTION

Ref. PN 815(02)

- Length: 1.0m
- Weight: 425gms





Scan here for a virtual tour of the product



HANGING HOOK

Ref. PN 815(03)

- Material: Alloy Steel, plastic moulded
- Weight: 190gms



Molded nut with Screw pin with a ring on head to enable easy adjustment and to restrict unnecessary movement during usage.



TELESCOPIC POLE

Ref. PN 815(04)

- Material: Fiberglass
- Maximum length: 7.95m
- Minimum length: 1.95m
- Weight: 3.80kg

ALUMINUM ANCHORAGE HOOK

Ref. PN 154



- Material: Aluminum Alloy
- Opening: 54.0mm
- Minimum Breaking Strength: 22kN
- Weight: 480gms
- Finish: Natural Silver / Coloured Anodized
- Certified to: EN 362:2004 Class A; EN 795:2012 Type B

STEEL ANCHORAGE HOOK

Ref. PN 156



- Material: Alloy Steel
- Opening: 90.0mm
- Minimum Breaking Strength: 22kN
- Weight: 880gms
- Finish: Natural Silver
- Certified to: EN 795:2012 Type B

TELESCOPIC POLE FOR RESCUE

This Rescue Pole is made from fiber glass and is extremely light in weight. It can be used as an extension to rescue a fall victim without descending to the victim for rescue.



Ref. PN 821N Ref. PN 821L

GENERAL FEATURES

- Portable and easy to carry
- Comes with an option of Aluminium Rebar Hook PN 136 to anchor at the required distance.



Technical Snapshot			
Ref.	**Minimum Length**	**Minimum Expanded Length**	**Weight**
PN 821N	0.75m	3.0m	739 gms
PN 821L		3.5m	840 gms

CHOOSING THE CORRECT ANCHORAGE SOLUTION

S. No.	Work Area	Hazard	Mobile Anchorage Solution	Fixed Anchorage Solution
1	Ladder	Fall due to vertical climbing up and down	Rope Grabs on flexible (textile) Anchorage Lines	• FPS on Rigid Cable Line- Ref. Vertex PN 6000 Ref. Vertex PN 7000 • FPS on Alu Rail- Ref. Vertex PN 8000 Ref. Vertex PN 9000
2	Roof top	• Fall through skylight • Fall from roof edge • Fall from roof slope	Temporary Horizontal Line- Ref. PN 3000(BC), Ref. PN 3001, Ref. PN 3001(C), Ref. PN 3002, Ref. PN 3002(C) Handy Line- Ref. PN 4001	Fixed Horizontal Line Systems- Ref. PN 4000, Ref. PN 5000
3	Scaffold	• Fall while erecting and dismantling the scaffold • Fall while working on scaffold	Rope Grabs on Textile Anchorage Lines	• FPS on Alu Rail- Ref. Vertex PN 8000 Ref. Vertex PN 9000
4	Truck loading / unloading	• Fall from truck • Injury due to swing fall	NA	Fixed Horizontal Line Systems- Ref. PN 4000, Ref. PN 5000
5	Beams and girders	Fall due to movement on beam	Point Anchorage Devices- Ref. SA 08, Ref. SA 15, Ref. SA 13	
6	Confined spaces	Fall while lowering or raising the user	Tripod, Megapod, Hexapod and Quadpod	K-Pod
7	Constructions	Fall through unguarded edges of platforms / slabs	Anchorage Slings and Point Anchorage Devices- Ref. PN 805, Ref. PN 806, Ref. SA 13A, Ref. SA 12, Ref. SA 09, Ref. SA 16	
8	Tower erection	Fall while erecting and dismantling the tower	Retractable Twin Block	
9	Exterior facade	Fall while working in suspended position	Parapet Anchors- Ref. SA 11, Ref. SA 11(B), Point Anchorage Devices- Ref. SA 12, Ref. SA 09	Floor Mounted Alu-Rail System Floor Mounted Wire Rope System
10	Rescue	Fall hazard	Anchorage Slings- PN 803, PN 807, PN 813	

TEMPORARY ANCHORAGE LINE SYSTEMS



KARAM provides a vast range of Temporary Horizontal and Vertical Anchorage Line Systems that are extremely easy to carry and install. These lifelines provide a suitable and safe anchorage to the user whenever required.

Pre-Use Checks for Rope Grab Fall Arrester and Anchorage Line



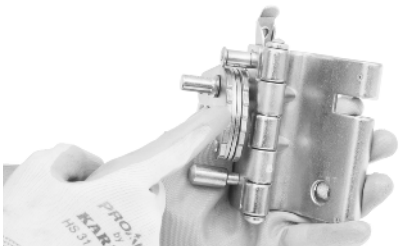
Check the inner part of the Rope Grab visually. It should not show any signs of deformity, bents, cracks or traces of corrosion on the body.



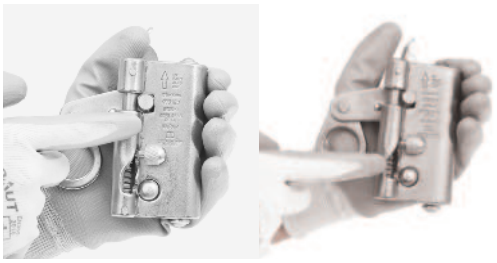
Check the anchorage line for any cuts, abrasion marks or any sharp objects.



Check for smooth opening, closing and locking. Once closed onto the anchorage line, the Rope Grab should not open on its own.



Check for any signs of rusting, corrosion or sharpness on the teeth of the Rope Grab.



Inspect the spring. Ensure that it should not be broken, and there should not be cracks, deformations, traces of corrosion or foreign objects.



Check the movement of Fall Arrester on Anchorage Line. It should move freely, and immediately grab the Rope when released.

Testing



DYNAMIC PERFORMANCE TEST

TESTED & CERTIFIED

CE 0598

IS 3521(Part 4):2021

CM/L 8300145814

NEW

T-LINE SYSTEM

THE T-LINE IS A TWIN LIFELINE SYSTEM

It is an innovative system, combining a lifeline, fall arrest and evacuation system in one providing a complete fall protection system when working at heights.

The unique design means it can be used where traditional fall protection devices cannot. T-Line consists of a single unit housing with two separate lifelines on separate spools that work independently of each other. Similar to an inertia reel, the lifelines are self-retracting and automatically lock at the onset of a fall.

This system has been designed to allow a person to move horizontally and vertically whilst removing the pendulum effect if a fall occurs. Due to the unique triangulation of the cables, prevents the pendulum movements and reduces the fall arrest distance, allowing installation in areas with little clearance available.

GENERAL FEATURES

- **Unparalleled Freedom of Movement**: Enjoy complete hands-free freedom to move both horizontally and vertically, spanning multiple levels from ground up.
- **Obstacle Bypass Capability**: Stay connected to the T-Line while effortlessly manoeuvring around overhead obstructions like pipelines, steelworks, and gantry cranes.
- **Access in Challenging Areas**: T-Line provides safe access where other systems fall short, making it ideal for working in areas with limited clearance, such as scaffolds etc.
- **Minimal Fall Arrest Distance**: With an extremely low fall arrest distance, the T-Line ensures protection even in confined spaces like flatbed trucks.
- **Easy and Efficient Installatio** : The 12 m system can be quickly installed by the user without any tensioning or adjustments. For the 24 m system, a trained installer is recommended.
- **Flexible Installation Options**: Mount each end at different heights to accommodate sloping roofs, beams, and various structures, with the main housing unit positioned lower than the secondary pulley.
- **Versatile Application**: Its robust build and minimalist design make the T-Line suitable for both permanent installations and portable usage, providing a quick and easy temporary solution.

APPLICATIONS

- Truck and bus workshop bays
- Heavy machinery maintenance
- Tanker wash bays and Truck wash
- Rail maintenance bays
- Tanker repair and access
- Aviation
- Platforms and walkways
- Manufacturing
- Maintenance access
- Construction
- Confined space
- Telecommunications



T-LINE WITH WINCH

Ref. T01A

NEW



ACCESSORIES AVAILABLE ON REQUEST

ANCHORAGE CLAVIS PN 4002R(09)

Is used to Anchor the T-Line on metal structures by using compatible fateners (U-bolt and nut)



ANCHOR(BC01)

Anchor to be installed on flange of beams. Comes with a adjustable jaws for installation to varying flange widths.



Technical Snapshot					
Ref.	**Product**	**Construction of Rope**	**Span Length of Wire Rope**	**Weight**	**Conforms to**
T01A	T-Line 12mtr. With Winch & GI Wire Rope	7 strand of 19 wires. Rope Ø4.8mm	Horizontal-6.0mtrs. Vertical-12.0mtrs Vertical-6.0mtrs Horizontal-12.0mtrs	20.10kgs ± 0.10kgs	EN 360:2002 & EN 1496:2017 Class B
T01 LSS	T-Line 24mtr. with Winch & SS Wire Rope		Horizontal-20.0mtrs. Vertical-24.0mtrs Vertical-20.0mtrs Horizontal-24.0mtrs	21.5kgs ± 0.10kgs	
T01L	T-Line 24mtr. with Winch & GI Wire Rope				
T01 ASS	T-Line 12mtr. with Winch & SS Wire Rope		Horizontal-6.0mtrs. Vertical-12.0mtrs Vertical-6.0mtrs Horizontal-12.0mtrs	20.10kgs ± 0.10kgs	

TEMPORARY VERTICAL ANCHORAGE LINE SYSTEMS

KARAM offers Temporary Vertical Anchorage Line Systems which are quick and easy to install. All these systems have uniquely designed Rope Grabs that grab onto the Anchorage Line on which they move, thus arresting the fall immediately.

GUIDED TYPE FALL ARRESTER SYSTEM ON FLEXIBLE ANCHORAGE LINE



Ref. PN 2000A

IS 3521(Part 4):2021 EN 353-2:2002



Ref. PN 2000B

IS 3521(Part 4):2021 EN 353-2:2002



Ref. PN 2000C

IS 3521(Part 4):2021 EN 353-2:2002

Technical Snapshot				
Ref.	**Rope Grab**	**Attachment Element**	**Anchorage Line**	**Certified t**
PN 2000A	Galvanized Steel Openable Rope Grab for fibre rope: Ref. RG 01	Steel Screw Locking Karabiner PN 112(C)	Polyamide Twisted rope of dia 14mm to 16mm.	EN 353-2:2002 IS 3521(Part 4):2021
PN 2000B	Galvanized Steel Openable Rope Grab RG 01 permanently stitched with Shock Absorber PN 300.			
PN 2000C	Galvanized Steel Openable Rope Grab RG 01 permanently stitched with spacing strap.	Steel Snap Hook PN 121		
The Anchorage Line has coloured tracer yarn which loses its colour in due course of time, to indicate that the rope is now unfit for further use.				



ROPE GRAB

Ref. RG 01

- Fail-proof design ensures correct usage.
- Arrests fall within a very short fall distance.
- Is equipped with a double security opening system, hence will not open unless deliberate action is taken.

Scan here *for a virtual tour of the product*



Only KARAM Openable Rope Grab Fall Arrester comes with the unique anti-gravity locking system.

Allows the user to go up but not slide down accidentally. Keeps in stationary position when locked.



Automatic locking



Locked position allows manual locking

GUIDED TYPE FALL ARRESTER SYSTEM ON FLEXIBLE ANCHORAGE LINE



Ref. PN 2003

- This system is an ideal fall restraint device for use while working on platforms and roofs.



Ref. PN 2004

- Consists of highly corrosion resistant rope grab, hence ideal for the marine and offshore atmosphere.

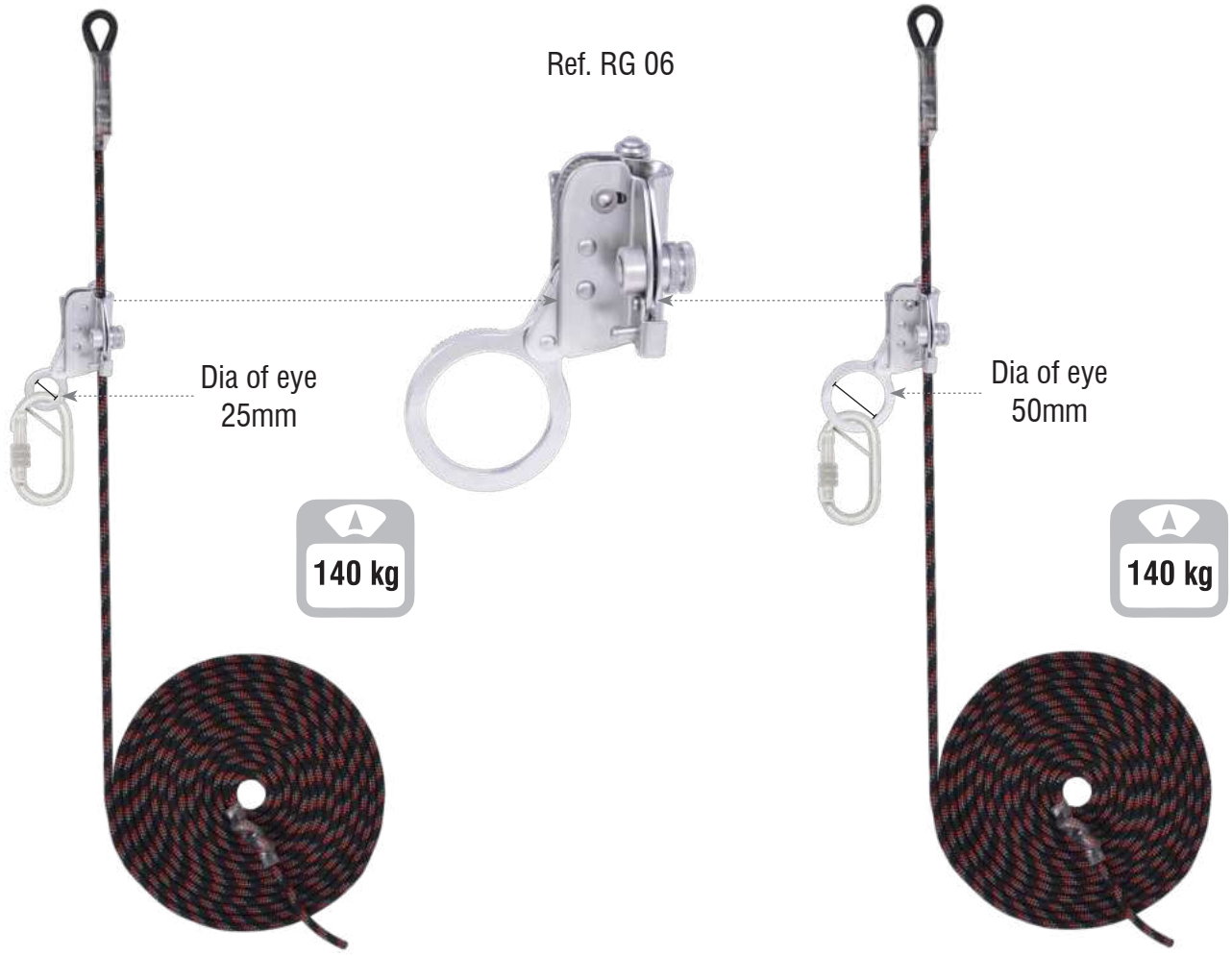
- These systems have one side loop for Connector and a stop knot on the other side. The termination is cross-stitched, and is protected with a strong transparent covering sleeve which not only protects the end but also makes the stitches visible for easy inspection prior to use.
- Abrasion resistant thimble at termination to protect the loops from being damaged by metallic contact.
- Rope Grab is not detachable from the rope. This gives an advantage that the worker does not lose the device when the equipment is not in use.
- Available in lengths of 5m to 100m.

IS 3521(Part 4):2021 AS/NZS 1891.3-2020 EN 353-2:2002

IS 3521(Part 4):2021 EN 353-2:2002

Technical Snapshot				
Ref.	**Rope Grab**	**Attachment Element**	**Anchorage Line**	**Certified t**
PN 2003	Galvanized Steel Non Openable Rope Grab RG 03 permanently stitched with Shock Absorber PN 300	Steel Screw Locking Karabiner PN 112(C)	Kernmantle Rope of dia 12mm	EN 353-2:2002 AS/NZS 1891.3-2020 IS 3521(Part 4):2021
PN 2004	Stainless Steel Non Openable Rope Grab RG 05 permanently stitched with Shock Absorber PN 300(S)			EN 353-2:2002 IS 3521(Part 4):2021
The Anchorage Line has coloured tracer yarn which loses its colour in due course of time, to show that the rope is now unfit for further use.				

GUIDED TYPE FALL ARRESTER SYSTEM ON FLEXIBLE ANCHORAGE LINE



Ref. PN 2005

Ref. PN 2005(AP)

- These systems have one side loop for connector and a stop knot on the other side. The termination is cross-stitched, and is protected with a strong transparent covering sleeve which not only protects the end but also makes the stitches visible for easy inspection prior to use.
- Abrasion resistant thimble at termination to protect the loops from being damaged by metallic contact.
- Available in lengths of 5m to 100m.

IS 3521(Part 4):2021 EN 353-2:2002

WHAT IS ANTI-PANIC?

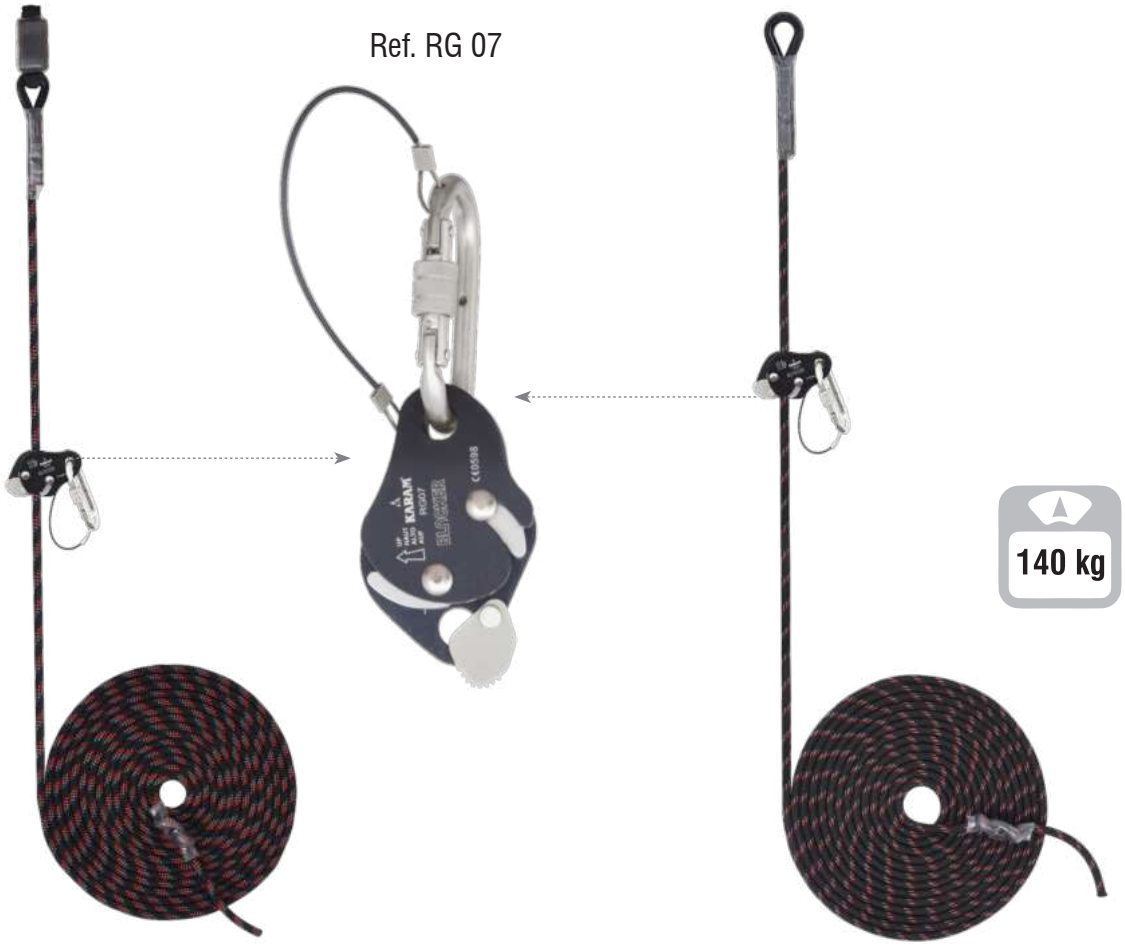
In most situations, the user comes under a state of panic when experiencing a fall. He immediately reaches out to grasp the rope grab, thereby releasing the cam and preventing the device from grabbing onto the rope. In such a case, the Rope Grab fails in its purpose and a fall is induced by the panic-stricken user.

KARAM offers an Anti-Panic locking feature in its Rope Grab system in PN 2005(AP), PN 2007(AP), PN 2008(AP) and PN 2010(AP), which helps to keep the Rope Grab securely anchored to the lifeline even when the user grips the device.

Scan here *for a virtual tour of the product*

Technical Snapshot				
Ref.	**Rope Grab**	**Attachment Element**	**Anchorage Line**	**Certified t**
PN 2005	Openable Stainless Steel Rope Grab: Ref. RG 06(25)	Steel Screw Locking Karabiner PN 112(C)	Kernmantle Rope of dia 12mm.	EN 353-2:2002 IS 3521(Part 4):2021
PN 2005(AP)	Openable Anti-Panic Stainless Steel Rope Grab: Ref. RG 06(50)			
The Anchorage Line has coloured tracer yarn which loses its colour in due course of time, to indicate that the rope is now unfit for further use.				

GUIDED TYPE FALL ARRESTER SYSTEM ON FLEXIBLE ANCHORAGE LINE



Ref. PN 2006

Ref. PN 2006(11)

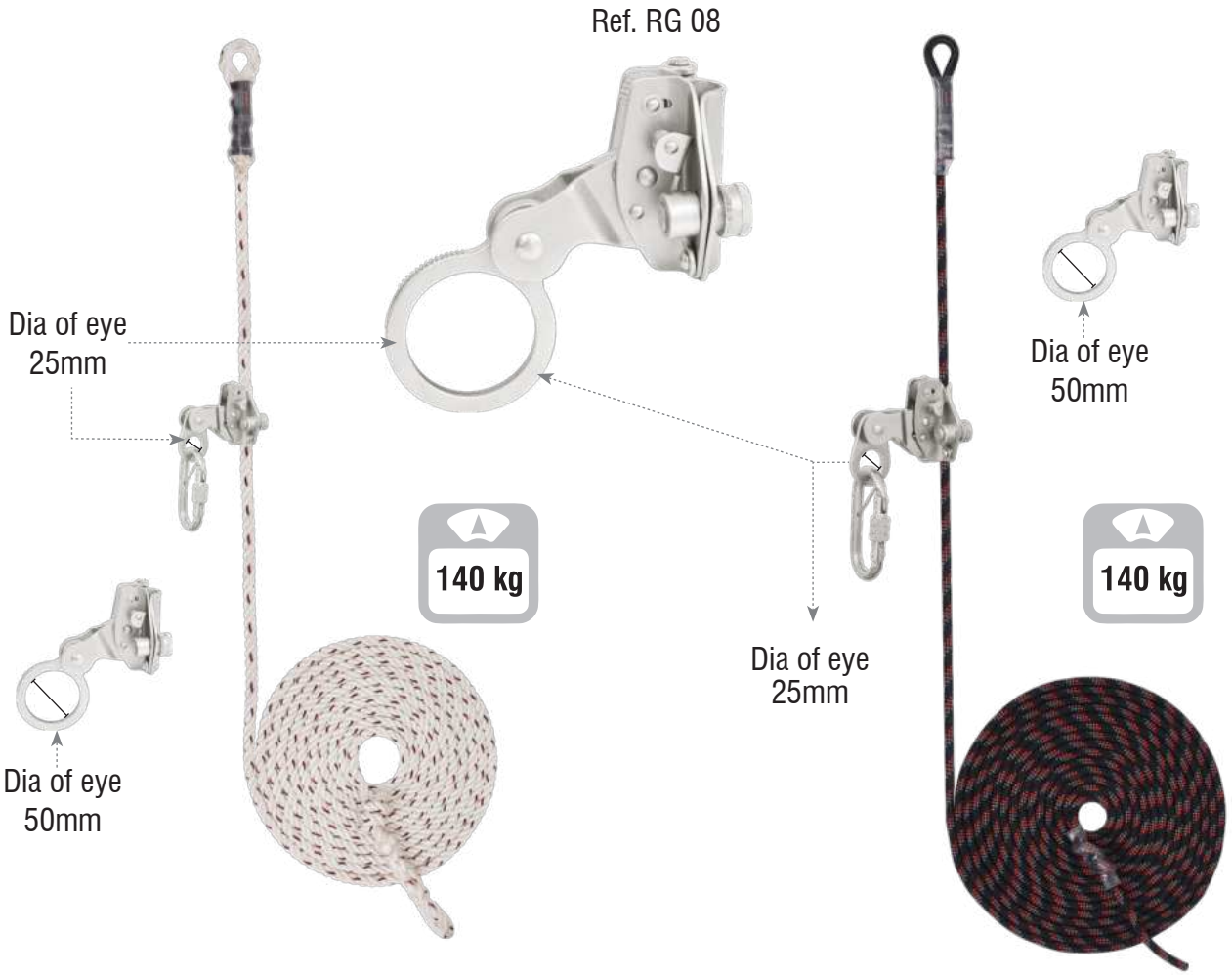
EN 353-2:2002

IS 3521(Part 4):2021 EN 353-2:2002
EN 12841:2006 Type A

- In both these systems, the Rope Grab (RG 07) has a manual lock position to allow work on an inclined roof, and also restraint positioning.
- PN 2006 has Energy Absorber at one end and a stop knot at other end whereas PN 2006(11) has one side loop for connector and a stop knot on the other side.
- Available in lengths of 5m to 100m.

Technical Snapshot				
Ref.	**Rope Grab**	**Attachment Element**	**Anchorage Line**	**Certified t**
PN 2006	Openable Aluminium Rope Grab Blocker: Ref. RG 07	Steel Screw Locking Karabiner PN 112 permanently attached with wire sling	Kernmantle Rope of dia 12mm.	EN 353-2:2002
PN 2006(11)			Kernmantle Rope of dia 11mm.	EN 353-2:2002 EN 12841:2006 Type A IS 3521(Part 4):2021
The Anchorage Line has coloured tracer yarn which loses its colour in due course of time, to indicate that the rope is now unfit for further use.				

GUIDED TYPE FALL ARRESTER SYSTEM ON FLEXIBLE ANCHORAGE LINE



Ref. PN 2007, PN 2007(AP)

- PN 2007(AP) comes with Anti-panic features.

Ref. PN 2008, PN 2008(AP)

- PN 2008(AP) comes with Anti-panic features.

- Both these systems have one side loop for Connector and a stop knot on the other side. The termination is spliced and protected by a strong transparent covering sleeve which not only protects the end but also makes the splicing visible for easy inspection before use.
- Abrasion resistant thimble to protect the loops from being damaged by metallic contact.
- Available in lengths of 5m to 100m.

IS 3521(Part 4):2021 EN 353-2:2002

IS 3521(Part 4):2021 EN 353-2:2002

Technical Snapshot				
Ref.	**Rope Grab**	**Attachment Element**	**Anchorage Line**	**Certified t**
PN 2007 **PN 2007(AP)**	**For PN 2007-** Openable Galvanized Steel Rope Grab: Ref. RG 08(25) **For PN 2007(AP)-** Openable Galvanized Steel Antipanic Rope Grab: Ref. RG 08(50)	Steel Screw Locking Karabiner PN 112(C)	Polyamide Twisted Rope of dia 14mm to 16mm.	EN 353-2:2002 IS 3521(Part 4):2021
PN 2008 **PN 2008(AP)**	**For PN 2008-** Openable Galvanized Steel Rope Grab: Ref. RG 08(25) **For PN 2008(AP)-** Openable Galvanized Steel Antipanic Rope Grab: Ref. RG 08(50)		Kernmantle Rope of dia 12mm.	
The Anchorage Line has coloured tracer yarn which loses its colour in due course of time, to indicate that the rope is now unfit for further use.				

GUIDED TYPE FALL ARRESTER SYSTEM ON FLEXIBLE ANCHORAGE LINE

Ref. RG 09F



Ref. PN 2009(F)

- Non-openable Aluminium Alloy Rope Grab: Ref. RG 09(F)
- Available in lengths of 5m to 100m.

Ref. RG 09



Ref. PN 2009

- Openable Aluminium Alloy Rope Grab: Ref. RG 09
- Available in lengths of 5m to 100m.



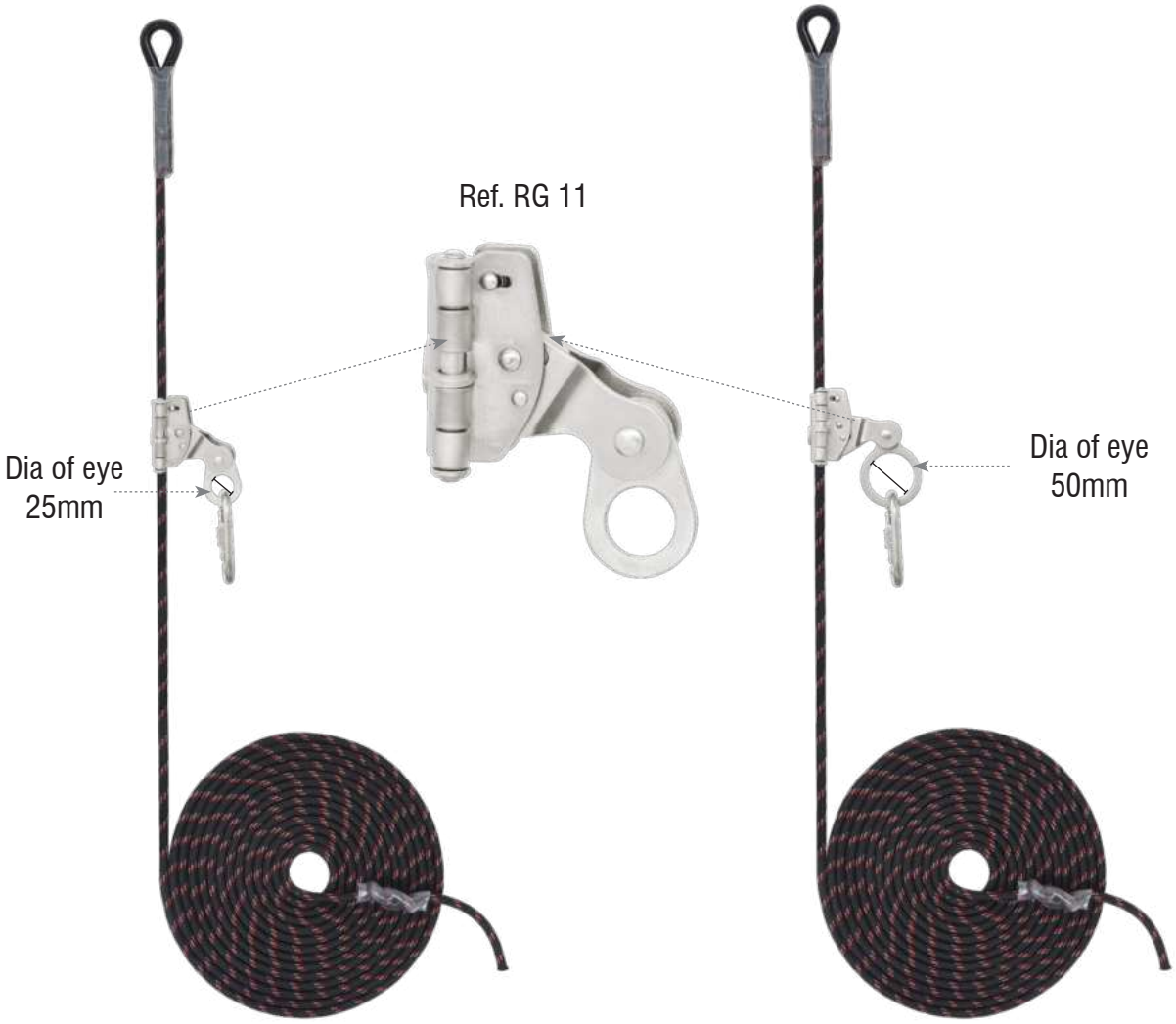
Ref. PN 2009(SA)

- Openable Aluminium Alloy Rope Grab Ref. RG 09 permanently stitched with Shock Absorber PN 300(S)
- Available in lengths of 5m to 100m.

IS 3521(Part 4):2021 EN 353-2:2002

Technical Snapshot			
Ref.	**Attachment Element**	**Anchorage Line**	**Certified t**
PN 2009	Steel Screw Locking Karabiner PN 112(C)	Kernmantle Rope of dia 11mm.	EN 353-2:2002 IS 3521(Part 4):2021
PN 2009(F)			
PN 2009(SA)			
The Anchorage Line has coloured tracer yarn which loses its colour in due course of time, to indicate that the rope is now unfit for further use.			

GUIDED TYPE FALL ARRESTER SYSTEM ON FLEXIBLE ANCHORAGE LINE



Ref. PN 2010

- Openable Galvanized Steel Rope Grab; Ref. RG 11 (25)

Ref. PN 2010(AP)

- Openable Galvanized Steel Antipanic Rope Grab; Ref. RG 11 (50)

IS 3521(Part 4):2021 EN 353-2:2002

Technical Snapshot			
Ref.	**Attachment Element**	**Anchorage Line**	**Certified t**
PN 2010	Steel Screw Locking Karabiner	Kernmantle Rope of dia 11mm and 12mm.	EN 353-2:2002 IS 3521(Part 4):2021
PN 2010(AP)			
The Anchorage Line has coloured tracer yarn which loses its colour in due course of time, to indicate that the rope is now unfit for further use.			

TEXTILE ROPES FOR ANCHORAGE LINES

KARAM offers Textile Anchorage Lines in both polyamide and polyester, made of Twisted Rope and Kernmantle Ropes, available in different lengths to suit application. These Anchorage Lines are certified as a system only when used with specific KARAM Rope Grab Fall Arresters.



TWISTED ROPE ANCHORAGE LINE (14MM)

- Made of 3-strand Polyamide Twisted Rope of dia 14mm.
- One side loop; other side stop knot. (Also available with both side loops).



KERNMANTLE ROPE ANCHORAGE LINE (12MM)

- Made of Polyester Kernmantle Rope of dia 12mm.
- One side loop; other side stop knot. (Also available with both side loops).



KERNMANTLE ROPE ANCHORAGE LINE (11MM)

- Made of Polyamide Kernmantle Rope of dia 11mm.
- One side loop; other side stop knot. (Also available with both side loops).



KERNMANTLE ROPE ANCHORAGE LINE WITH ENERGY ABSORBER (12MM)

- Made of Polyester Kernmantle Rope of dia 12mm.
- One side Energy Absorber PN 300 (S); other side stop knot. (Also available with other side loops).

Technical Snapshot		
Anchorage Line	**Ref.**	**Length**
Twisted Rope Anchorage Line (14mm)	Anchor PN 910	10m
	Anchor PN 920	20m
	Anchor PN 930	30m
	Anchor PN 940	40m
	Anchor PN 950	50m
	Anchor PN 9100	100m
	Anchor PN 9150	150m
	Anchor PN 9200	200m
Kernmantle Rope Anchorage Line (11mm)	Anchor PN 910 (KRKD 11)	10m
	Anchor PN 920 (KRKD 11)	20m
	Anchor PN 930 (KRKD 11)	30m
	Anchor PN 940 (KRKD 11)	40m
	Anchor PN 950 (KRKD 11)	50m

*Note: Longer length are also available on request.

Technical Snapshot		
Anchorage Line	**Ref.**	**Length**
Kernmantle Rope Anchorage Line (12mm)	Anchor PN 910 (KRAL 12)	10m
	Anchor PN 920 (KRAL 12)	20m
	Anchor PN 930 (KRAL 12)	30m
	Anchor PN 940 (KRAL 12)	40m
	Anchor PN 950 (KRAL 12)	50m
Kernmantle Rope Anchorage Line with Energy Absorber (12mm)	Anchor PN 910 (KRAL 12)(S)	10m
	Anchor PN 920 (KRAL 12)(S)	20m
	Anchor PN 930 (KRAL 12)(S)	30m
	Anchor PN 940 (KRAL 12)(S)	40m
	Anchor PN 950 (KRAL 12)(S)	50m

*Note: Longer length are also available on request.

ACCESSORIES



PROTECTIVE SLEEVE

Ref. PR 01

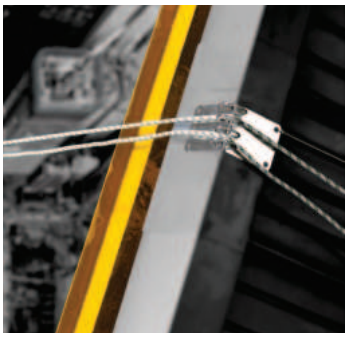
- Designed to protect flexible Anchorage Lines against abrasion on sharp edges.
- Made of polyester tubular webbing of width 33mm.
- Is moveable along the length of the Anchorage Line.
- Non-openable.
- Standard length 30cm. However, it can be customized as per requirement.



OPENABLE PROTECTIVE SLEEVE

Ref. PR 02

- Designed to protect flexible Anchorage Lines against abrasion due to friction.
- Is made of flexible PVC and is detachable.
- The width of PR 02 is: Open: 130mm and Folded: 50mm.
- Can be opened/closed with the help of velcro tape stitched along the length.
- Standard length: 55cm.



Scan here *for a virtual tour of the product*



EDGE PROTECTOR

Ref. ARC 02

- Material: Stainless Steel.
- Protects the rope from abrasion against an edge.
- The edge ring-guides on the angle of the Edge protector prevents different Anchorage Lines from getting entangled over the edge.

IS 3521(Part 7):2021

HORIZON TEXTILE HORIZONTAL LINE

KARAM offers the Horizon range of Temporary Horizontal Lifelines, made of textile webbing and rope, which is extremely easy to carry and install wherever required. These Anchorage Lifeline systems by KARAM provide a suitable and safe anchorage horizontally along the entire length.



Scan here *for a virtual tour of the product*

Ref. PN 804
(1.0m)

HORIZON TEMPORARY HORIZONTAL WEBBING ANCHORAGE LINE

Ref. Horizon PN 3000(BC)

- The Horizon PN 3000(BC) is a Horizontal Anchorage Lifeline made up of 30mm polyester webbing equipped the KARAM Ratchet tensioner that allows easy tensioning of the lifeline between two structures. Both the ends are provided with Auto-Locking Steel Karabiners PN 113.
- Comes with 2 Cross Arm Straps PN 804 each to tie off to the structure where the anchorage is required.
- 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 comfortable shoulder hanging straps provided in the bag.
- Available length- total 20m, so the user can use it for a length ranging from 5m to 20m.
- Tested and 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.
- Certified to EN 795:2012, IS 3521(Part 8):2021 and TS 16415:2013 Type B&C (for up to 2 users).

IS 3521(Part 8):2021 EN 795:2012
TS 16415:2013 Type B&C

HORIZON 4 MAN TEMPORARY HORIZONTAL ROPE ANCHORAGE LINE

KARAM introduces a new Horizon 4 Man Temporary Horizontal Lifeline, which is extremely easy to carry and install. It provides a suitable and safe anchorage horizontally along the entire length. Suitable for up to 4 personnel.

Ref. Horizon PN 3001



Ref. Horizon PN 3001(C)



GENERAL FEATURES

- Quick and easy to install, also reusable.
- PN 3001 has 4 Steel O-Rings to enable the user to easily attach the Lanyard of his Harness to the Lifeline using a Karabiner.
- PN 3001(C) has 4 Cross Over Anchors SA 29 made of stainless steel to allow easy crossing over between users, and prevent any disengagement from the lifeline, ensuring 100% tie off at all times.
- Consists of a tension indicator for creating an adequate tension in the line. Once the required tension is achieved, the disc on the tension indicator gets released, indicating the line is ready to use.
- Has swivel connector- specially designed to prevent any twisting of the rope.
- Minimum breaking strength: 25kN
- The whole system is supplied in a bag (Ref. BGFB 161), which is permanently attached to the assembly. Enables the user to easily carry the system with the help of comfortable handles provided in the bag. This bag is designed in such a way that it keeps the unused rope safely, thereby preventing the rope from being subjected to abrasion or any damage caused by dust, dirt grime, oil etc. Once fitted, you can easily put back the extra rope not deployed along the length, into the bag.
- Certified to EN 795:2012 Type C and TS 16415:2013 Type C (for up to 4 users).

Scan here *for a virtual tour of the product*

CE

EN 795:2012 Type C
TS 16415:2013 Type C

Technical Snapshot

Ref.	Rope type	Material of tensioner	Attachment ends	Anchorage type	Max. no. of users	Max. span length	Weight
PN 3001	Kernmantle Rope of dia 16mm	Aluminium and Stainless steel	One end-Swivel Connector with PN 113 Other end-Tension Indicator with PN 113	Forged Galvanized Steel O-Rings. Qty-4 nos.	4 users	5m to 25m	9.28kg ± 0.10kg
PN 3001(C)				Cross Over Anchors. Qty-4 nos.			10.11kg ± 0.10kg

HORIZON 2 MAN TEMPORARY HORIZONTAL ROPE ANCHORAGE LINE

The new Horizon 2 Man Temporary Horizontal Lifeline is another lifeline that is quick and easy to install.
This Lifeline is suitable for upto 2 personnel.

Ref. Horizon PN 3002



Ref. Horizon PN 3002(C)



GENERAL FEATURES

- **PN 3002** has 2 steel O-rings to enable the user to easily attach the lanyard of his Harness to the lifeline using a Karabiner.
- **PN 3002(C)** has 2 Cross Over Anchors (SA 29) made of Stainless Steel to allow easy crossing over between users, and prevent any disengagement from the lifeline, ensuring 100% tie off at all times.
- Has a unique tension indicator in which once the required tension is achieved, the disc on the tension indicator gets released, indicating the line is ready to use.
- Minimum breaking strength: 25kN.
- The whole system is supplied in a bag, which is permanently attached to the assembly. Enables the user to easily carry the system with the help of comfortable handles provided in the bag. This bag is designed in such a way that it keeps the unused rope safely, thereby preventing the Rope from being subjected to abrasion or any damage caused by dust, dirt grime, oil etc.
- Once fitted, you can easily put back the extra rope not deployed along the length, into the bag.
- Certified to EN 795:2012 Type C and TS 16415:2013 Type C (for up to 2 users).

CE

EN 795:2012 Type C
TS 16415:2013 Type C

Technical Snapshot

Ref.	Rope type	Material of tensioner	Attachment ends	Anchorage type	Max. no. of users	Max. span length	Weight
PN 3002	Kernmantle Rope of dia 16mm	Galvanized Steel	One end- Stitched loop with PN 113 Other end- Tension indicator with PN 113	Forged Galvanized Steel O-rings qty- 2 nos.	2 users	5m to 25m	8.26kg ± 0.10kg
PN 3002(C)				Cross Over Anchors qty- 2 nos.			9.02kg ± 0.10kg

HANDY LINE TEMPORARY HORIZONTAL LIFELINE

Ref. Horizon PN 4001N

KARAM offers the Horizontal Lifeline to protect those workers working in the horizontal plane who may not have continuous access to suitable anchorage points.

Scan here for a virtual tour of the product





GENERAL FEATURES

- Housing is made up of durable and high-strength polymer.
- Lightweight and portable design.
- Extremely easy to install; retractable lifeline is simply pulled out for installation up to the required length and retracted back with the built-in winch into an easy-to-carry case.
- Has inbuilt Winch for easy retraction of rope back into the housing/case for fast, simple and safe dismantle.
- Eliminating large and bulky coils of cable that are difficult to set-up and store.
- Has an inbuilt shock absorption mechanism to limit the impact forces during fall arrest.
- Has molded handle for easy carriage.
- Comes with PN 113(C) at the termination end for easy connection.

KARAM ADVANTAGE

- Can be used by a maximum of 2 users simultaneously.
- Has a tension indicator to indicate required tension in the line.
- Padded handle for easy transportation.
- Comes with load Indicator for easy fall arrest inspection.

Ex II 2 G — ATEX 2014/34/EU

CE — EN 795:2012
TS 16415:2013 Type C
(for upto 2 users)

Technical Snapshot				
Construction of rope	**Maximum span Length of wire rope**	**System breaking Strength**	**Weight**	**Cirtified t**
7x19 Galvanized Steel Wire Rope of dia 6.0mm	18.0m	24kN	14.30kg	**EN 795:2012 Type C TS 16415:2013 Type C (for up to 2 users) ATEX 2014/34/EU**



EDGE FIX ANCHOR POST

Ref. SA 28

KARAM offers a portable and extremely easy to install Anchor Post for installation of Horizontal Line on steel construction I-Beam section.



GENERAL FEATURES

- Span lengths are adjustable with help of intermediates.
- Suitable to be used by 4 users simultaneously
- Comes with KARAM universal extremity plate PN4000(09) and intermediate PN4000(10).
- Compatible upto 220.0mm width of I beam.

Technical Snapshot				
Ref.	**Material**	**Weight**	**Minimum Breaking Strength**	**Certified t**
SA 28	ED coated high strength alloy steel	12.80kg	15kN	EN 795:2012 Type B **Conforms to TS 16415:2013 Type B (for upto 4 users)**

RETRACTABLE FALL ARRESTER BLOCKS



One of the biggest challenges in fall protection is when the Anchorage point is too high to access and the clearance distance is too small. KARAM Retractable Fall Arrester Blocks provide an ideal solution for such a problem.

Standards at a Glance

All Blocks certified to EN 360:2023 standard must meet these requirements

Requirements:

- Design and Ergonomics
- Materials and Construction
- Retraction Tension and Function
- Static Strength
- Dynamic Test

Blocks which are certified to IS 3521 (art 3):2021standard must meet the below requirements:

Wire rope diameter requirement for SRL lifeline made from wire rope: The min. dia of wire rope material used in lifeline shall be 5 mm.

Breaking strength requirement for lifeline material: SRL made from wire rope having minimum breaking strength of 15kN. SRL made from webbing having minimum breaking strength of 22kN

Locking performance: SRL are in compliance with requirement of locking performance after conditioning without slippage.

Locking reliability: SRL are in compliance with the requirement of locking reliability with minimum rated load

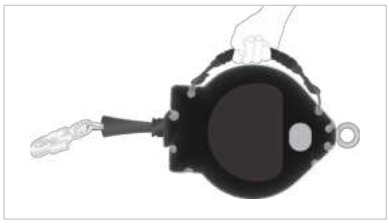
Dynamic performance: SRL are in compliance with dynamic performance requirement with fall arrest force less than 6kN & fall arrest distance less than 2mtr.

Static strength: SRL are in compliance with static strength requirement. SRL made of wire rope are having static strength 12kN & SRL made of webbing are having static strength 15kN.

Additional benefit offered

KARAM offers built in **Side Handle** with special grip for perfect comfort heavier blocks. This special handle comes incorporated in all Polymer casing, GI and Webbing Lanyard Blocks of 10m size to 30m size.

KARAM handle is placed on the side of the Block. This enables the Block to be carried easily and also prevents the Retractable line to hit against the ground while walking (which may be a case if the handle was placed at the top).



TESTED & CERTIFIED

CE 0598

IS 3521(Part 3):2021

CM/L 8300145907

Testing



DYNAMIC TESTING



PROOF LOAD TESTING

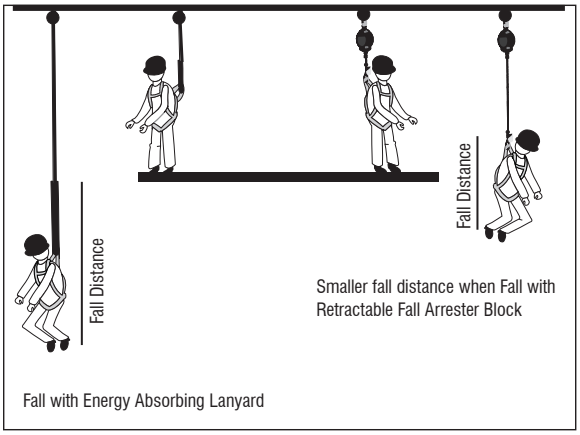
RETRACTABLE FALL ARRESTER BLOCKS-
The Perfect Solution for Challenging Situations

Challenges faced during work at height:

- Working on towering heights.
- Work in areas having less clearance distance.
- Repeated work on a defined site, at a height.
- Lack of enough suitable Anchorage points.

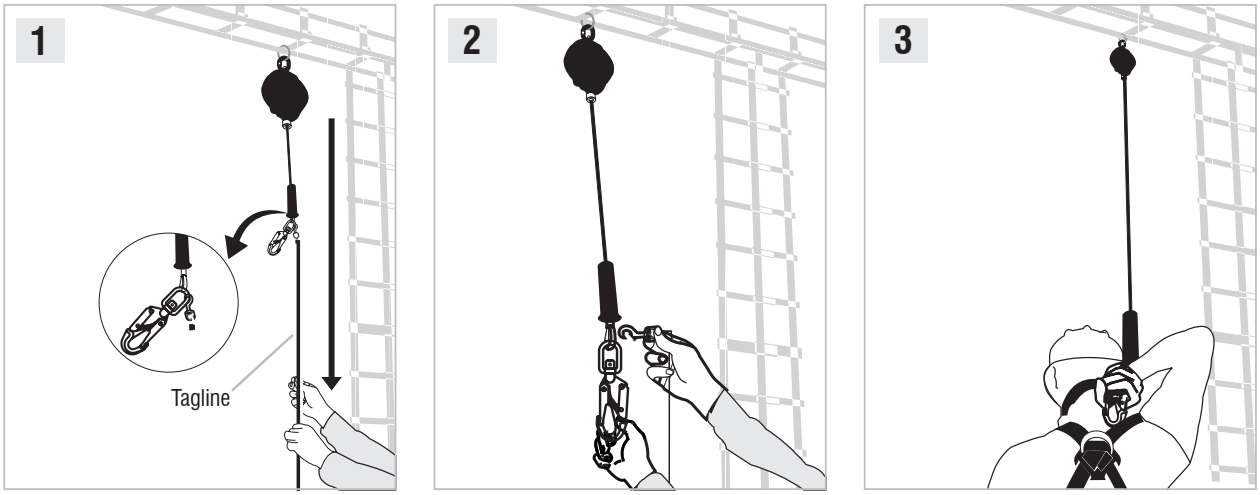
Retractable Block:

- Can be anchored at a single point and allows the user to move uninhibited at different levels.
- The connecting Lanyard is such that it retracts or extends to different lengths as required, is always taut, with no slack.
- In the event of a fall, the Block locks immediately, with minimum fall distance and lowers the impact of force to less than 6 kN.



PULL DOWN THE LANYARD OF BLOCK USING TAG LINE

Scan here *for a virtual tour of the product*





ISI CERTIFIED RETRACTABLE BLOCKS IN POLYMER CASING WITH GALVANIZED STEEL WIRE ROPE

100 kg

IS 3521(Part 3):2021 EN 360:2023



- Swivel Eye
- Polymer Casing
- Fall Impact Indicator
- Galvanized Steel Wire Rope Ø 5mm
- Swivel Hook PN 162
- MBS = 15kN
- Certified to EN 360:202 and IS 3521(Part 3):2021

GALVANIZED STEEL WIRE ROPE

Wire Rope Length: 2.0m



Ref. PCGS 02(IS)	1.82kg

Wire Rope Length: 5m



Ref. PCGS 05(IS)	2.94kg

Wire Rope Length: 7.5m



Ref. PCGS 7.5(IS)	3.90kg

Wire Rope Length: 16m



Ref. PCGS 16(IS)	6.90kg

Wire Rope Length: 27m



Ref. PCGS 27(IS)	13.08kg

ISI CERTIFIED RETRACTABLE BLOCKS IN POLYMER CASING WITH WEBBING LANYARD

IS 3521(Part 3):2021 EN 360:2023

100 kg



- Swivel Eye
- Polymer Casing
- Fall Impact Indicator
- 25mm Webbing Width
- Swivel Hook PN 162
- MBS = 16kN
- Certified to EN 360:202 and IS 3521(Part 3):2021

WEBBING LANYARD

Lanyard Length: 02m



Ref. PCWB 02(IS)	1.12kg

Lanyard Length: 3.5m



Ref. PCWB 3.5(IS)	1.68kg

Lanyard Length: 6m



Ref. PCWB 06(IS)	2.40kg

Lanyard Length: 10m



Ref. PCWB 10(IS)	5.73kg

IS 3521(Part 3):2021 EN 360:2023
EN 1496:2017 Class B

ISI CERTIFIED RETRIEVAL RETRACTABLE BLOCKS

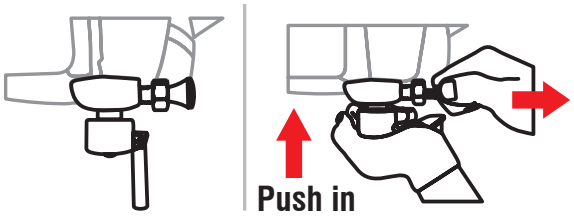
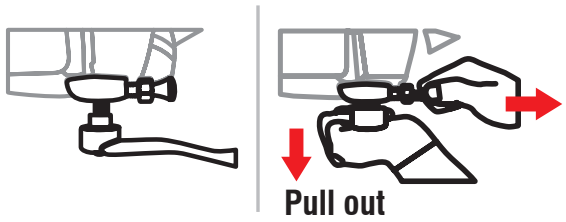
KARAM offers a unique range of Retrieval Fall Arrest Blocks to enable easy retrieval of a victim of fall. These Blocks allow the fall to arrest and also allow easy hoist of the victim with the help of their inbuilt Winch mechanism when mounted on Megapods, Tripod, K-Pod using specialized brackets, etc.

100 kg

GENERAL FEATURES

- Comes with Retractable Lifeline made of Galvanized Steel Wire Rope of dia 5.0mm.
- The locking pin on the side of the casing at the base of the handle allows this dual system to work in independent Fall Arrest and Winch modes.
- Comes with a unique Hydro seepage system to drain clogged water which accumulates in the block during usage.
- Comes with PN 162 Swivel Snap Hook with Impact Indicator.
- Certified to EN 360:2023 and EN 1496:2017 Class B and IS 3521(Part 3):2021.

IT IS EASY TO SHIFT TO WINCH MODE FROM BLOCK MODE (AND VICE VERSA) FOLLOWING THE BELOW STEPS

BLOCK MODE	WINCH MODE
	
Pull the pin and push the Handle to reverse in Block mode	Pull the pin and handle to shift to Winch Mode

RETRACTABLE MODE - ENABLES EASY MOVEMENT OF THE USER WHILE WORKING IN CONFINED SPACE
WINCH MODE- ENABLES EASY RETRIEVAL OF THE VICTIM POST FALL ARREST

100 kg

IS 3521(Part 3):2021

EN 360:2023
EN 1496:2017 Class B

Wire Rope Length: 16m



Ref. PCGS 16R(IS)	9.33kg

Wire Rope Length: 27m



Ref. PCGS 27R(IS)	15.07kg

ARMOR BLOCK WITH SEALED CASING

KARAM offers Armor range of Blocks specially meant for the toughest and harshest environments. The heavy duty sealed design, corrosion resistant material used in the Block keeps the critical working components free of dirt, grease, water and chemicals. It is best suited for Oil and Gas Industries and offshore areas.

Sealed Design (meets IP69 K Level of ISO 20653:2013)
All critical parts of the block are sealed from contamination thereby increasing its reliability in harsh conditions.

Vibration Test (meets IEC 60068-2-6)
Tested against sine vibration as per IEC 60068-2-6

Side Handle
Consists of side handle for easy carriage and safe transportation.

Stainless Steel Cover
For maximum durability in harsh environments.

Snout for minimizing the accidental Locking
Consists of Snout which minimizes the accidental locking of the Block when the wire rope is released suddenly.

4.5mm diameter Retractable Stainless Steel Wire Rope of length 30m
Provides increased strength

Quick Lifeline Assembly
The only non-sealed portion of the block can easily be changed on site by a competent person. The wire rope can be changed quickly and easily with minimum tools.

Wire Rope Length: 30m



Ref. SLBL 30	17.0 kgs

II 2 G CE
EN 360:2023
IP69K Level of ISO 2065:2013

Pivoting Anchorage Loop
Allows the block to move slightly to minimize friction on the cable if the block is not well aligned.



Scan here for a virtual tour of the product

Certified t
EN 360:2023
IP69K Level of ISO 20653:2013
ATEX 2014/34/EU

Impact Indicator in Hook
Allows easy visual inspection to determine if the unit has experienced a fall by a user.

Stainless Steel Swivel Snap Hook PN 162SS
at attachment end.

Wire Rope Length: 10m



Ref. SLBL 10	7.36 kgs

Wire Rope Length: 15m-20m



Ref. SLBL 15	11.43 kgs
Ref. SLBL 20	11.6 kgs

MICRON BLOCK

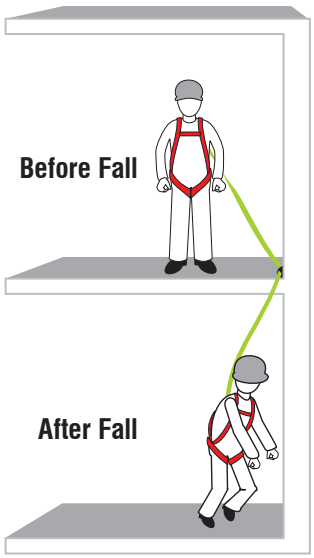
Ref. MIC 02

The ergonomically designed MICRON is light in weight, easy to use and ideal for direct connection to most Harnesses.

140 kg

CE

EN 360:2023



Fall Factor 2

In Fall Factor 2, Anchor point is located below the foot

***Scan here** for a virtual tour of the product*



GENERAL FEATURES

- Length of webbing: 2m.
- Ideal for direct connection to most Harnesses and can be easily used as a lanyard replacement. It is best suited for situations where the anchor point is available at foot level.
- Locks quickly; providing more protection at low heights.
- Extremely light in weight.
- High-strength housing provides maximum durability.
- Comes with Aluminium Swivel Quarter Turn Locking Hook PN 130 having impact indicator at the attachment end.
- Automatic quick fall arrester to arrest fall to less than 4kN and fall arrest distance to less than 600mm.
- Meets the Sharp Edge Test and Passes the Dynamic Test of Fall Factor 2.
- Minimum breaking strength: 16kN
- Certified to EN 360:2023

MIKRON AS A LANYARD

KARAM offers a unique Twin SRL Connector to use Micron as both Single and Forked Lanyards.



Twin SRL Connector
Ref. PN 174

GENERAL FEATURES

- Micron can be used as a Single or Forked Lanyard as per requirement.
- No additional connector is required.
- Reduces the length of the swing during the fall thereby preventing the Micron from hitting the head of the user.
- Can be attached to any of the Harnesses.
- Installed on the webbing of the Harness, so the Dorsal D-ring is free for attaching other equipment or rescue.
- Snug fit design and provides 100% tie-off configuration.
- Provides mobility when moving from one location to another.
- Certified to EN 362:2004 Class M

HOW TO USE MIKRON AS A SINGLE OR TWIN LANYARD WITH TWIN SRL CONNECTOR (REF. PN 174)	
	Open connector by pushing the locking lever and push button at the end simultaneously.
	Slide connector through loosened web straps placed below the Dorsal D-ring, then pull straps tight
	Push the pin inside the grooves of the connector to ensure locking

MICRON TWIN LANYARD WITH SHOCK PACK

Ref. MIC12N(131N)

140 kg

CE

EN 360:2023

KARAM introduces the MICRON TWIN LANYARD with SHOCK PACK specially designed with an integrated shock absorber allowing the user to operate where anchor is below foot level. It is light weight, robust, comfortable and comes with the quick SRL connector which can be easily attached to a range of Harnesses.

NEW



Shock with cover pack at harness attachment end.

Twin SRL connector (PN 174) for connection to the Dorsal attachment of Harness.

Swivel anchorage eye at anchorage end.

Robust & durable plastic casing.

Dynamic Webbing of width 21.0mm

Aluminium Scaffold Hook PN 136 at termination end.

Ref. MIC12N(131N)	2.52kg

GENERAL FEATURES

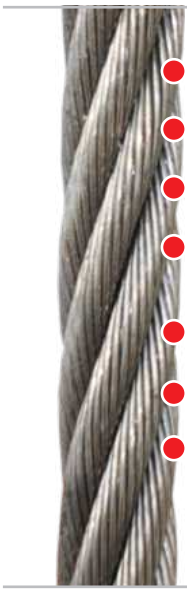
- Light in weight.
- Compatible to be used where anchor point not available above users
- head / can be used near a potential sharp edge.
- Can be mounted at foot level.
- Passes the Dynamic Test of Fall Factor 2.
- Minimum Breaking Strength:15kN
- Can be used where anchor is below foot level.
- Conforms to EN 360 : 2023

RETRACTABLE BLOCKS IN POLYMER CASING WITH GALVANIZED STEEL WIRE ROPE

140 kg

II 2 G

EN 360:2023



- Swivel Eye
- Polymer Casing
- Fall Impact Indicator
- Galvanized Steel Wire Rope Ø4.5mm
- Swivel Hook PN 162
- MBS = 13kN
- Certified to EN 360:2023 an Atex for use in potentially explosive atmosphere as per Directive 2014/34/EU

GALVANIZED STEEL WIRE ROPE

Wire Rope Length: 3.5m



Ref. PCGS 3.5N	2.23kg

Wire Rope Length: 5m-7m



Ref. PCGS 05	2.80kg
Ref. PCGS 06	2.88kg
Ref. PCGS 07	2.96kg

Wire Rope Length: 7.5m-10m



Ref. PCGS 7.5	3.80kg
Ref. PCGS 10	4.00kg

Wire Rope Length: 12m-20m



Ref. PCGS 12	6.10kg
Ref. PCGS 15	6.40kg
Ref. PCGS 18	6.80kg
Ref. PCGS 20	7.15kg

Wire Rope Length: 25m-30m



Ref. PCGS 25	12.50kg
Ref. PCGS 30	12.80kg

**Also available in Stainless Steel Wire Rope*

RETRACTABLE BLOCKS IN POLYMER CASING WITH WEBBING LANYARD

140 kg

CE

EN 360:2023



- Swivel Eye
- Polymer Casing
- Fall Impact Indicator
- 25mm Webbing Width
- Swivel Hook PN 162
- MBS = 16kN
- Certified to EN 360:2023 and Atex for use in potentially explosive atmosphere as per Directive 2014/34/EU

WEBBING LANYARD

Lanyard Length: 02m



Ref. PCWB 02	1.11kg

Lanyard Length: 3.5m



Ref. PCWB 3.5N	1.60kg

Lanyard Length: 5m-6m



Ref. PCWB 05	2.36kg
Ref. PCWB 06	2.40kg

Lanyard Length: 7.5m



Ref. PCWB 7.5	3.20kg

Lanyard Length: 10m-12m



Ref. PCWB 10	5.70kg
Ref. PCWB 12	5.85kg

SHARP EDGE TESTED RETRACTABLE BLOCKS IN POLYMER CASING WITH GALVANIZED STEEL WIRE ROPE

CE
EN 360:2023

SHARP EDGE
TESTED BLOCKS

AREA OF USE
In conditions where the worker is exposed to sharp edge hazard.

CERTIFIED TO
Vertical usage as per EN 360:2023

Wire Rope Length: 3.5m



Ref. PCGS 3.5N(SE)	2.40kg

Wire Rope Length: 5m-7m



Ref. PCGS 05(SE)	3.05kg
Ref. PCGS 06(SE)	3.15kg
Ref. PCGS 07(SE)	3.25kg

Wire Rope Length: 7.5m-10m



Ref. PCGS 7.5(SE)	3.85kg
Ref. PCGS 10(SE)	4.05kg

SHARP EDGE TESTED RETRACTABLE BLOCKS IN POLYMER CASING WITH 25MM WIDE WEBBING LANYARD

100 kg
CE
EN 360:2023

SHARP EDGE
TESTED BLOCKS

CERTIFIED TO
Vertical usage as per EN 360:2023

Lanyard Length: 02m



Ref. PCWB 02(SE)	1.24kg

Lanyard Length: 3.5m



Ref. PCWB 3.5N(SE)	1.70kg

Lanyard Length: 5m-6m



Ref. PCWB 05(SE)	2.50kg
Ref. PCWB 06(SE)	2.55kg

RETRIEVAL RETRACTABLE BLOCKS

KARAM offers a unique range of Retrieval Fall Arrest Blocks to enable easy retrieval of a victim of fall. These Blocks allow the fall to arrest and also allow easy hoist of the victim with the help of their inbuilt Winch mechanism when mounted on Megapods, Tripod, K-Pod using specialized brackets, etc.

140 kg

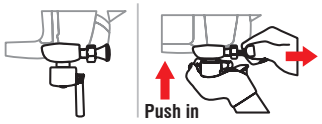
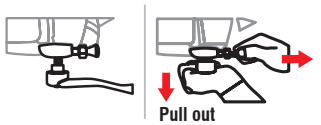
II 2 G

EN 360:2023
EN 1496:2017 Class B

GENERAL FEATURES

- Comes with Retractable Lifeline made of Galvanized / Stainless Steel Wire Rope of dia 4.5mm.
- The locking pin on the side of the casing at the base of the handle allows this dual system to work in independent Fall Arrest and Winch modes.
- Comes with a unique Hydro seepage system to drain clogged water which accumulates in the block during usage.
- Comes with PN 162 Swivel Snap Hook with Impact Indicator.
- Certified to EN 360:2023 and EN 1496:2017 Class B, ATEX 2014/34/EU

IT IS EASY TO SHIFT TO WINCH MODE FROM BLOCK MODE (AND VICE VERSA) FOLLOWING THE BELOW STEPS

BLOCK MODE	WINCH MODE
	
Pull the pin and push the Handle to reverse in Block mode	Pull the pin and handle to shift to Winch Mode

RETRACTABLE MODE- ENABLES EASY MOVEMENT OF THE USER WHILE WORKING IN CONFINED SPACE
WINCH MODE- ENABLES EASY RETRIEVAL OF THE VICTIM POST FALL ARREST

Wire Rope Length: 20m



Ref. PCGS 20R(N)	9.41kg

Wire Rope Length: 25m-30m



Ref. PCGS 25R	14.1kg
Ref. PCGS 30R	14.15kg

**Also available in 10m and 15m lengths*

KORE-BLOCKS AND RETRIEVAL WITH SYNTHETIC TEXTILE ROPE RETRACTABLE LANYARD

140 kg

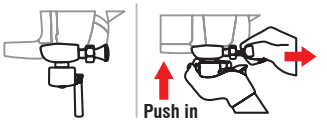
EN 360:2023
EN 1496:2017 Class B

KARAM Introduces KORE... a range of Retractable Fall Arrester Blocks with highly durable abrasion resistant rope which helps to resist abrasion and heat.

GENERAL FEATURES

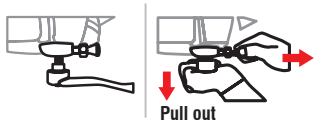
- Light in weight and portable.
- These Blocks have been specially designed for workers working offshores, and in areas with an acidic environment or high temperature.
- Casing made up of high impact strength polymer to prevent breakage, making it nearly indestructible.
- Comes with abrasion resistant textile rope of dia 6.0mm
- Ref. PCSR 18R comes with a unique Hydro seepage system to drain clogged water which accumulates in the block during usage.
- Has Swivel Snap Hook PN 162 with impact indicator.
- Anchorage eye with swivel action. Prevents undue twisting of the rope while working or in the event of a fall.
- Minimum Breaking Strength > 15kN
- Ref. PCSR 18 is certified to EN 360:2023 and Ref. PCSR 18R is certified to EN 360:2023, EN 1496:2017 Class B.

BLOCK MODE



Pull the Pin and Push the Handle to Reverse in Block Mode

WINCH MODE



Pull The Pin and Handle to Shift to Winch Mode

Ref. PCSR 18R enables easy retrieval of a victim of fall. This Block allows the fall to arrest and also allows easy hoist of the victim with the help of their inbuilt Winch mechanism.



ABRASION RESISTANT TEXTILE ROPE

Lanyard Length: 18m



Ref. PCSR 18	8.20kg

Lanyard Length: 18m



Ref. PCSR 18R	9.71kg

RETRACTABLE BLOCKS IN ALUMINIUM CASING

KARAM also offers a range of Retractable Blocks in Aluminium Casing, having Galvanized / Stainless Steel Wire Rope Lanyard and 25mm Webbing Lanyard.



GENERAL FEATURES

- The casing is made of high strength Aluminium Alloy.
- The anchorage eye comes with a swivel action, preventing any undue twisting of the retracted lanyard (rope or webbing) while working, or in the event of the fall.
- Certified to EN 360:2023.

Lanyard Length: 3.5m-7.5m





Ref. ALWB 3.5	3.38kg
Ref. ALWB 04	3.50kg
Ref. ALWB 05	3.54kg
Ref. ALWB 06	3.58kg
Ref. ALWB 7.5	3.64kg

Lanyard Length: 8m-12m





Ref. ALWB 08	6.39kg
Ref. ALWB 10	6.47kg
Ref. ALWB 12	6.55kg

Wire Rope Length: 4m-10m







Ref. ALGS 04	4.45kg
Ref. ALGS 05	4.63kg
Ref. ALGS 06	4.78kg
Ref. ALGS 7.5	5.05kg
Ref. ALGS 10	5.46kg

Wire Rope Length: 12m-20m







Ref. ALGS 12	6.82kg
Ref. ALGS 15	7.06kg
Ref. ALGS 18	7.30kg
Ref. ALGS 20	7.46kg

MINI BLOCK (SWIVEL)

Ref. PN 2002(SW)

EN 360:2023



Ref. PN 2002(SW)	1.40kg

- Has a protective casing.
- Having a swivel arrangement at anchorage end with fall indicator.
- Has a retractable webbing of width 47mm.
- Maximum length: 2.5m.
- Incorporated with an Energy Absorber for shock absorption.
- Supplied with Steel Screw Locking Karabiner PN 112 at anchorage and attachment end.
- Minimum Breaking Strength> 15kN.
- Certified to EN 360:2023

KARAM Retractable Wire Rope Blocks are provided with a "Holding Snout" made up of soft Thermoplastic Elastomer:

The Snout minimizes the accidental locking of the Block when the wire rope is released suddenly.

The Holding Snout provides dampening of the impact experienced onto the Block casing when the Wire Rope is released suddenly. This prevents the Block to 'lock' accidentally in such cases, and allows better usage.



It allows a safer and more comfortable grip on the wire rope when the Block is inspected for retraction and locking prior to use.

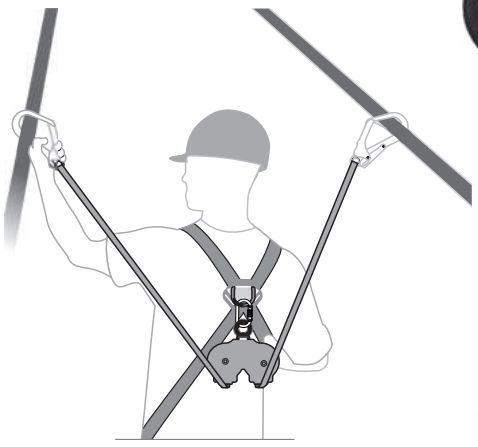
It is mandatory to inspect the Block for its working (which includes retraction and locking of the Wire Rope) prior to each use. In the absence of the Holding Snout, a discomfort may be felt while retracting the wire rope to inspect the Block. The Holding Snout allows to grip the wire rope safely while testing the Block for locking and retraction without any discomfort.



TWIN RETRACTABLE BLOCK

Ref. ALWB 2x2

EN 360:2023



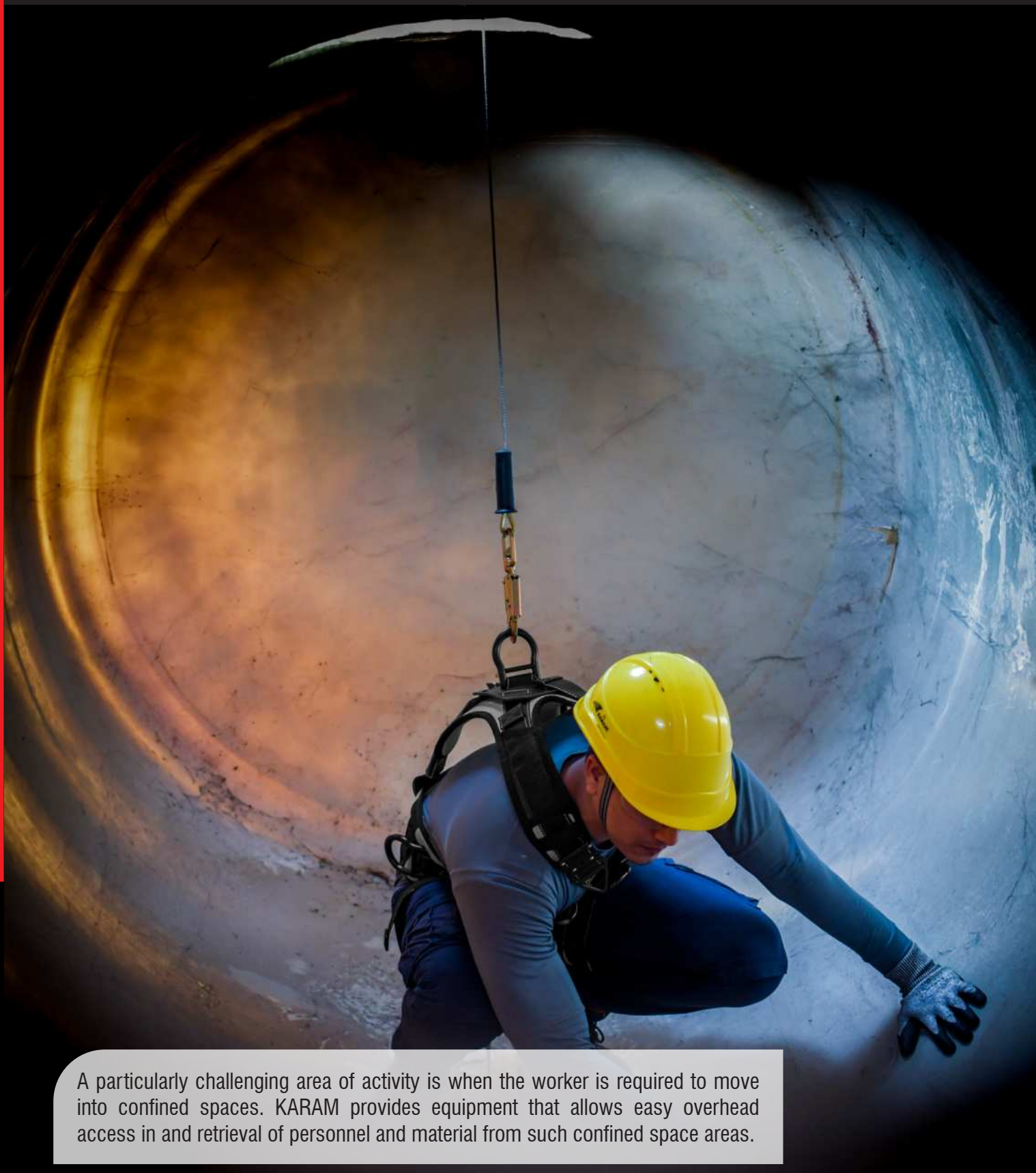


- Has a compact light weight design.
- Minimum breaking strength > 15kN.
- Certified to EN 360:2023
- The length of the Retractable Lifeline extends upto 2m and the two work
- independently, automatically retracting.
- Replaces a simple regular lanyard with the convenience of a Retractable Lifeline.

Ref. ALWB 2x2	2.63kg

NOTE

CONFINED SPACE ENTRY

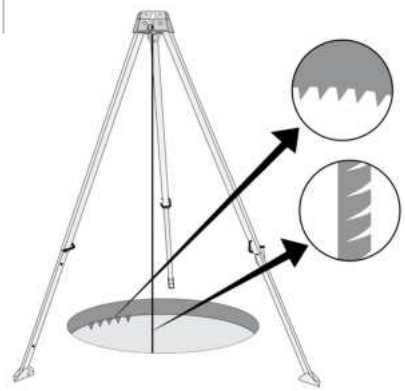


A particularly challenging area of activity is when the worker is required to move into confined spaces. KARAM provides equipment that allows easy overhead access in and retrieval of personnel and material from such confined space areas.

Points to Remember...
While using the Tripod



The Tripod must be mounted where it can be leveled using the leg adjustments.



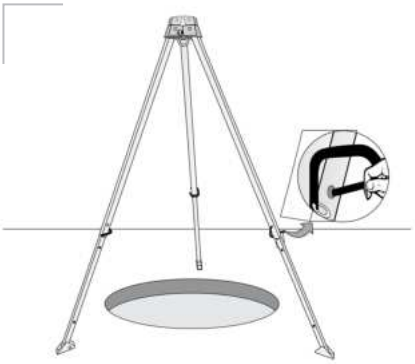
Avoid positioning the Tripod where the working line may abrade against sharp edges.



Position the Tripod such that the lifeline will be directly over the intended work area when installed.



The mounting surface onto which the Tripod is erected must meet minimum strength of static load of at least 12kN for Personnel Riding and Rescue.

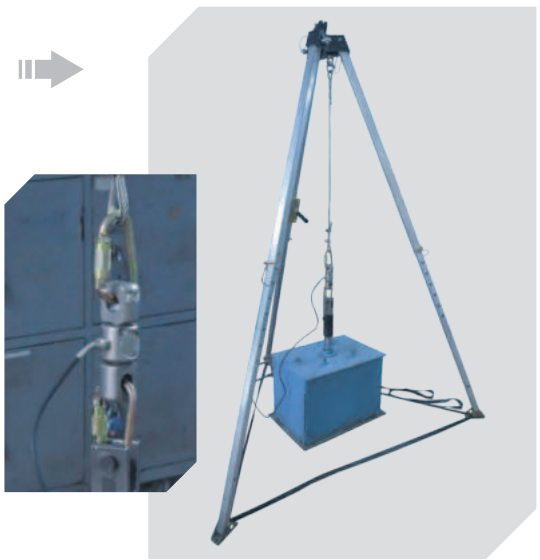


The pins on the legs of the Tripod must be securely locked for supporting the intended loading.



Never allow the working line to extend outside the legs of the Tripod as tripping of the tripod could occur.

Testing



STATIC TEST OF TRIPOD

TESTED & CERTIFIED

ANSI CE 0598 IS 3521(Part 7):2021 CM/L 8300149309

MEGAPOD

Ref. SA 17

IS 3521(Part 7):2021 AS/NZS 5532:2013 ANSI Z359.18-2017 Type A EN 795:2012 Type B

When it comes to confined space entry / rescue, it is essential that the equipment operates perfectly and quickly. Keeping this in mind, KARAM introduces Megapod: a convenient product that provides a stable overhead anchorage point.

The Megapod comes with wide and fully adjustable aluminium telescopic legs for use in particularly challenging areas of work eg. manholes, tanks etc.



***Scan here** for a virtual tour of the product*

GENERAL FEATURES

- Is equipped with high quality rugged systems that ensure superior performance.
- Made from Aluminium that makes it extremely light-weight and portable.
- Easily set-up by just one worker and can be transported from one work area to another.
- Consists of pre-installed universal mounting attachments to easily mount the Winch and Retrieval Block when used with SA 17(25) Winch Bracket and SA 17(26) Retrieval Bracket.
- Inner and outer adjustment can be achieved by sliding telescope legs.
- Can be used with all the Winches PN 801(DP), PN 817(DP), PN 801(40)(DP), PN 818(DP), PN 818SR(DP), PN 818(C)(DP) and Retrieval Fall Arrester Blocks PCGS 20R(N), PCGS 25R and PCGS 30R with the help of their universal mounting brackets for Winches and Retrieval Blocks respectively.
- Strength of anchor point is greater than 23kN.
- Comes with a sturdy bag to pack.



Also available with wheels SA 17(W)7ft with locking feature for mobility and stability during usage.



- Double pulley system permanently incorporated in the cast aluminum head of the Megapod provides independent passing over of cable from a Winch and a Retrieval Block.
- 2 auxiliary eye bolts for easy over head anchorage.

Mounting brackets for Megapod	Picture	Bracket used for mounting
Ref. SA 17(25)		Winches PN 801(DP), PN 801(40)(DP), PN 817(DP), PN 818(DP), PN 818SR(DP),PN 818(C)(DP)
Ref. SA 17(26)		Retrieval Blocks PCGS 20R(N), PCGS 25R, PCGS 30R



FOOT REST

Ref. PN 800(42)

Also available as an additional option. Can be installed on the leg of the Megapod for easy accessibility to the cast head for passing the wire through pulleys.

Technical Snapshot					
Ref.	**Height**	**Wheelbase footprint (Ø)**	**Weight**	**Maximum load capacity**	**Certified t**
SA 17(7ft)	7 ft	2.0m	19.0kg	500kg	EN 795:2012 Type B, Atex 2014/34/EU AS/NZS 5532:2013 IS 3521(Part 7):2021 **Conforms to ANSI Z359.18-2017 Type A**
SA 17(W)(7ft)	7 ft	2.0m	19.34kg		EN 795:2012 Type B, Atex 2014/34/EU IS 3521(Part 7):2021

TRIPOD

Ref. PN 800 (DP)

II 2 G

IS 3521(Part 7):2021 AS/NZS 5532:2013 EN 795:2012 Type B

Tripod is one such product that can be used for easy access by a worker into confined spaces such as man-holes, tanks, etc. It provides a means of controlled ascent and descent, as well as protection from fall, should the depth of the space require it.



***Scan here** for a virtual tour of the product*

GENERAL FEATURES

- Comes with double integral head mounted pulleys which are permanently incorporated in the cast aluminum head of the Tripod and provide independent passing over of cable from a Winch and a Retrieval Block.
- Consists of two auxiliary eye bolts as attachment points.
- Material of cast head and legs: Aluminium Alloy.
- Consists of Steel support-shoes provided with rubber sole to increase friction and impart more stability.
- Strength of anchorage point is greater than 23 kN.
- Every Tripod is provided with pre-installed universal mounting attachments to easily mount the Winch and Retrieval Blocks.
- Can be used with Winches PN 801(DP), PN 801(40)(DP), PN 817(DP), PN 818(DP), PN 818(SR)(DP), PN 818(C)(DP) when used with PN 800(44) Winch Bracket and Retrieval Blocks PCGS 20R(N), PCGS 25R and PCGS 30R when used with PN 800(45) Retrieval Bracket.
- Comes with a sturdy bag to pack.



Ref. PN 800(DPW) 7ft
PN 800(DPW) 10ft

Tripod with double pulley head 7ft and 10ft are also available with wheels having locking feature for mobility and stability during usage.

Mounting brackets for Tripod	Picture	Bracket used for mounting
Ref. PN 800(44)		Winches PN 801(DP), PN 801(40)(DP), PN 817(DP), PN 818(DP), PN 818(SR)(DP), PN 818(C)(DP)
Ref. PN 800(45)		Retrieval Blocks PCGS 20R(N), PCGS 25R, PCGS 30R



FOOT REST

Ref. PN 800(42)

Also available as an additional option. Can be installed on the leg of the Tripod for easy accessibility to the cast head for passing the wire through pulleys.

Technical Snapshot					
Ref.	**Height**	**Wheelbase footprint (Ø)**	**Weight**	**Maximum load capacity**	**Certified t**
PN 800(DP)(7ft)	7 ft	1.5m	12.25kg	500 kg	EN 795:2012 Type B, Atex 2014/34/EU IS 3521(Part 7):2021
PN 800(DP)(10ft)	10 ft	2.0m	16.9kg		EN 795:2012 Type B, Atex 2014/34/EU AS/NZS 5532:2013, IS 3521(Part 7):2021
PN 800(DPW)(7ft)	7 ft	1.5m	12.55kg		EN 795:2012 Type B, Atex 2014/34/EU IS 3521(Part 7):2021
PN 800(DPW)(10ft)	10 ft	2.0m	17.2kg		

UNIVERSAL MOUNTING BRACKETS IN MEGAPOD(SA 17) AND TRIPOD (PN 800(DP))



KARAM offers Universal Mounting Brackets in its range of Tripods and Megapods for ease and convenience of the user.
The "One Bracket Fits all kind of Arrangements" has also been done to easily attach different variants of Winches and Retrieval Blocks on these Mounting Brackets.

	TRIPOD Ref. PN 800(DP)			MEGAPOD Ref. SA 17		
						
	Brackets used with Tripod variants			**Brackets used with Megapod variants**		
	PN 800(44) Sub 1  Part of standard Tripod	PN 800(44)  Part of standard Winch	PN 800(45) 	SA 17(25) Sub 1  Part of standard Megapod	SA 17(25)  Part of standard Winch	SA 17(26) 
Supplied with Tripod and Megapod	Yes	No	No	Yes	No	No
Can be Purchased Separately	Yes	Yes	Yes	Yes	Yes	Yes



	Compatible with the following Products			Compatible with the following Products		
	Tripods	**Winches**	**Retrieval Blocks**	**Megapods**	**Winches**	**Retrieval Blocks**
	PN 800(DP) (7ft)	PN 801(DP)	PCGS20R(N)	SA 17 (7ft)	PN 801(DP)	PCGS20R(N)
	PN 800(DP) (10ft)	PN 817(DP)	PCGS25R	SA 17 (10ft)	PN 817(DP)	PCGS25R
	PN 800(DPW) (7ft)	PN 818(DP)	PCGS30R	SA 17W (7ft)	PN 818(DP)	PCGS30R
	PN 800(DPW) (10ft)	PN 818(SR)(DP)		SA 17W (10ft)	PN 818(SR)(DP)	
		PN 818(C)(DP)			PN 818(C)(DP)	
						

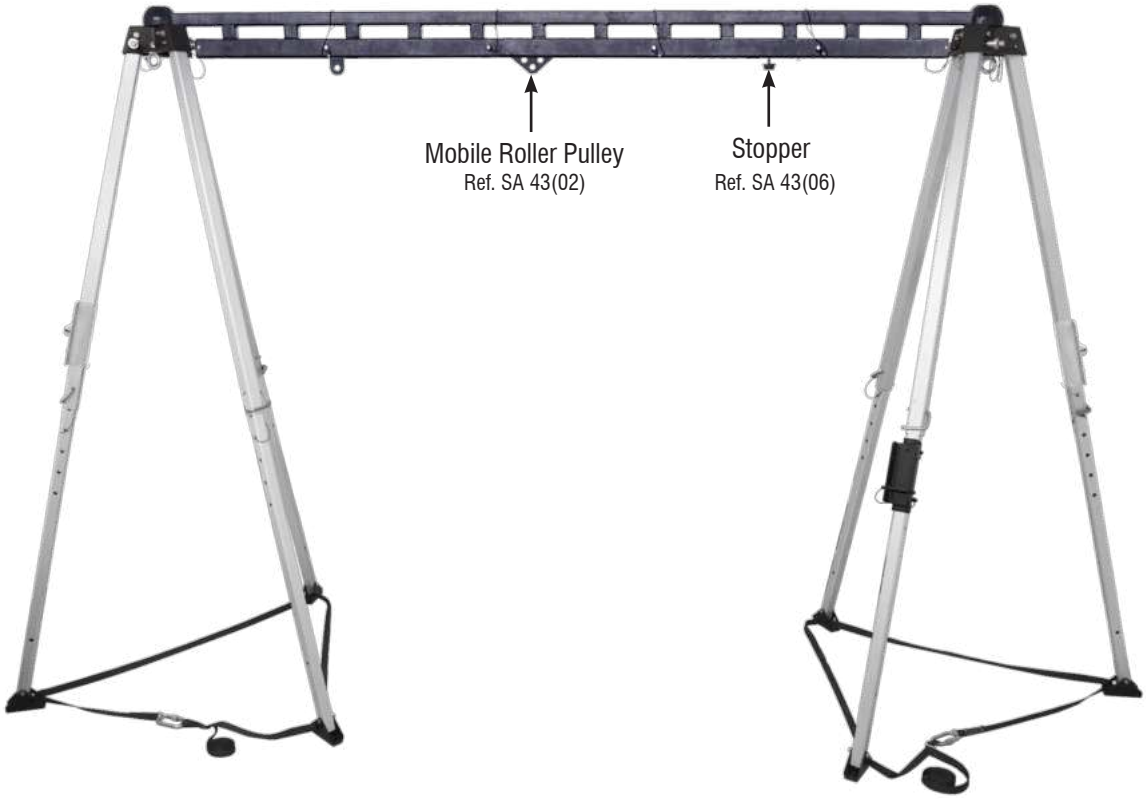
HEXAPOD

Ref. SA 43

KARAM offers Hexapod for entries in confined spaces which are below ground level and larger in hole size.

Ex II 2 G CE

EN 795:2012 Type B
TS 16415:2013 Type B





Ref. SA 43(W)
Hexapod is also available with wheels having locking feature for mobility and stability during usage.



FOOT REST
Ref. PN 800(42)

Also available as an additional option. Can be installed on the leg of the Tripod for easy accessibility to the wire through pulleys.

GENERAL FEATURES

- Specifically designed for entry, rescue and lifting into confined spaces with larger openings and below the ground level.
- Ideal for use in trenches, large holes, mines and lift shafts.
- Made from lightweight Aluminium Alloy.
- Mobile Roller Pulley used as an anchor to provide user mobility for a maximum of 2300 mm.
- Stopper to locate the anchorage point over the user's head on desired location of user.
- Can be used with three Aluminium Anchorage pulleys (AP 012SS) at the head of both the Tripods and Anchorage Pulley AP 017SS(BB) at the centre for guiding the cable of rescue Winch.
- Can be used by two users in case of rescue only.
- Has two auxiliary eye bolts in both the Tripods each as attachment-points.
- Steel Support Shoes provided with rubber sole to increase friction and impart more stability.
- Hexapod is provided with an inbuilt fixture for attaching our Winch PN 801A and Retrieval Blocks PCGS 20R(N), PCGS 25R and PCGS 30R with the help of mounting bracket PN 800(45).

Accessories to be purchased separately


Ref. PCGS 30R

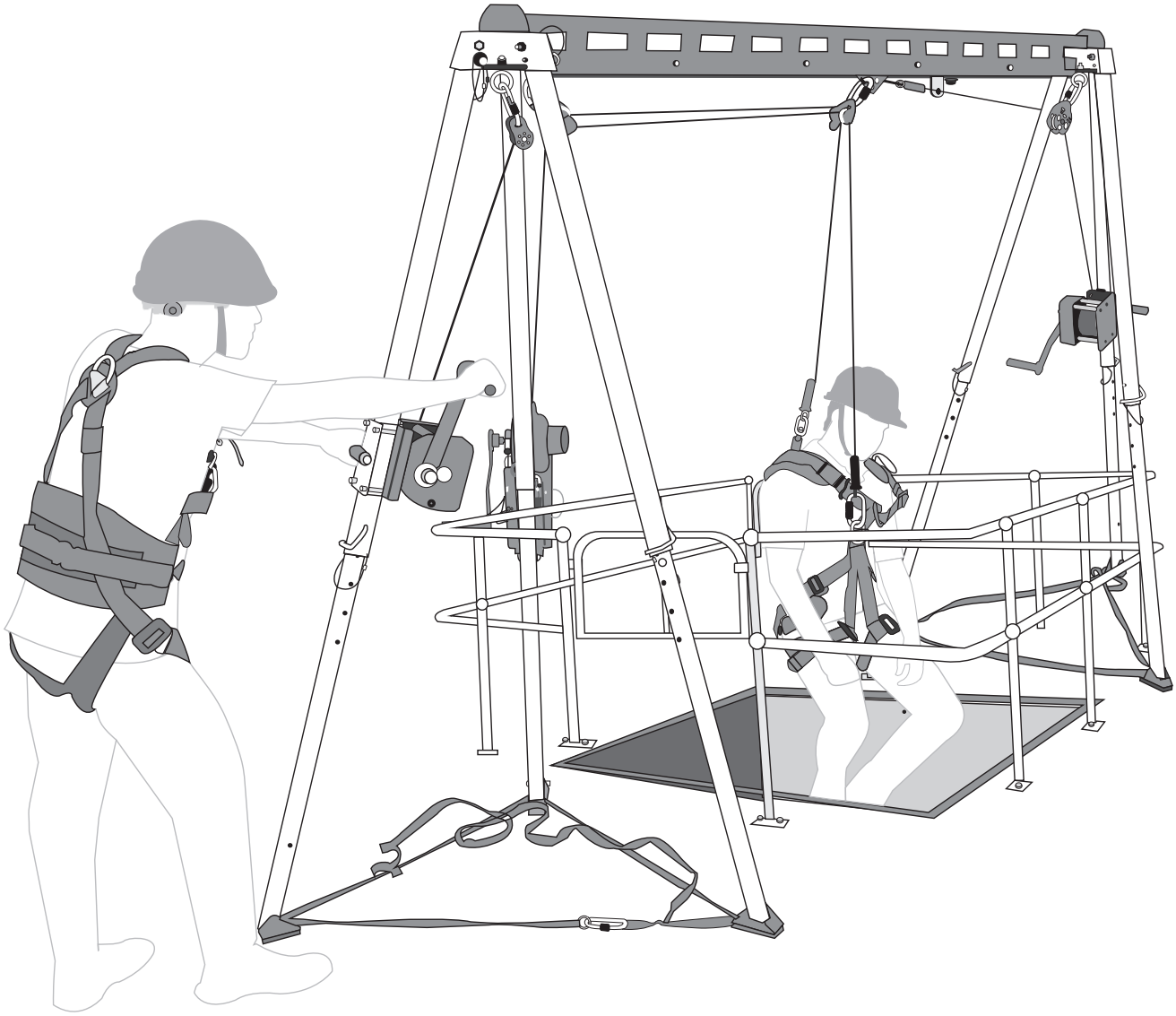

Ref. PN 800(45)


Ref. PN 801A


Ref. PN 112


Ref. AP 012(SS)


Ref. AP 017SS(BB)



Example of Application

Technical Snapshot						
Ref.	**Material**	**Height**	**Max. Span Length**	**Max. Load Capacity**	**Weight**	**Certified t**
SA 43	Tripod cast head and leg: Aluminium Alloy Rail supported welded sub assembly: High strength Alloy Steel Locking pins material: Stainless Steel	2.15 m	2300 mm	500 kg	51.29 kg	Certified to EN 795:2012 Type B TS 16415:2013 Type B Atex 2014/34/EU
SA 43(W)					53.28 kg	**Conforms to** **EN 795:2012 Type B** **TS 16415:2013 Type B** **Atex 2014/34/EU**

CANTILEVER K-POD

Ref. PN 900

II 2 G

AS/NZS 5532:2013 EN 795:2012 Type A

KARAM offers K-Pod which provides a safe and secure 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.



Note: Winch and Retrieval Block are to be ordered separately

GENERAL FEATURES

- 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.
- 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 lower arm adjustment at 1.5m. This enables the use of the K-Pod even in those areas where the roof height is small.
- 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.
- Cantilever is equipped with universal mounting bracket PN 900(14) to install Winches PN 801(DP), PN 801(40) (DP) and PN 817(DP), PN 818, PN 818(DP), PN 818(SR)(DP) onto the K-Pod.
- Retrieval Fall Arrester Block Ref. PCGS 30R, PCGS 25R, PCGS 20R(N) can also be installed for easy retrieval and arresting the fall of the user using the specialized mounting bracket Ref. PN 900(06) and PN 900(07) respectively.
- Certified to EN 795:2012 Type A, Atex 2014/34/EU and Certified to AS/NZ 5532:2013
- Conforms to EN 795:2012 Type A

Setting	Upper	Middle	Lower
Distance from bar	0.72m	1.0m	1.08m
Height of arm	2.3m	1.9m	1.5m

***Scan here** for a virtual tour of the product*

ACCESSORIES OF K-POD



Floor mounting bracket
Ref. PN 900(01)



Wall mounting bracket
Ref. PN 900(02)

Mounting brackets for K-Pod	Picture	Bracket used for mounting
Ref. PN 900 (06)		25m Retrieval Block Ref. PCGS 25R, 30m Retrieval Block Ref. PCGS 30R
Ref. PN 900 (07)		20m Retrieval Block Ref. PCGS 20R(N)

AS/NZS 5532:2013 EN 795:2012 Type B

DAVIT ARM SYSTEMS

KARAM introduces a range of Davit Arm systems specially designed for confined space entry/rescue applications. It is ideal for providing portable, safe overhead anchorage in large confined areas like manholes, storage tanks etc. It also allows the user to adjust the height accordingly for overhead clearance restrictions.

APPLICATION

Vault and manhole entry, pump / lift / valve stations, water treatment and waste water industries, underground vaults, clarifier tanks, industrial facilities, construction sites, oil and gas industry, utilities and infrastructure, transportation and shipping, mining industry, emergency services etc.



GENERAL FEATURES

- **Versatile Access**: KARAM Davit Systems provide safe and secure access to confined spaces, allowing workers to enter and exit these areas efficiently.
- **Easy Installation**: The Davit Systems are designed for easy installation on various surfaces, including concrete, metal structures, or vehicles, using suitable fasteners.
- **Modular Design**: The systems feature a modular design with components that can be easily stored, transported, and set up without needing tools. This ensures convenience and flexibility in deployment.
- **Height Adjustability**: The Davit Systems offer adjustable heights to accommodate different requirements. Users can easily adjust the height of the Upper Mast Offset (Boom) to suit their specific needs.
- **Multiple Anchorage Points**: The Davit Systems are equipped with multiple anchorage points, allowing for the attachment of fall protection devices and rescue equipment. This ensures safety during confined space operations and enables effective rescue operations.
- **Swivel Capability**: The Davit Systems have built-in swivel capability, enabling 360-degree rotation of the Davit column assembly even while under load. This feature enhances flexibility and ease of use.
- **Compatibility with Winches and Retrieval Blocks**: The Davit Systems are compatible with a range of KARAM Winches and Retrieval Blocks, allowing for seamless integration and comprehensive safety setups.
- **Certificatio** : The Davit Systems are certified to meet international safety standards, including EN 795:2012 Type B, Atex 2014/34/EU, and AS/NZS 5532:2013. This certification ensures compliance and reliability in safety operations.
- **Included Accessories**: The Davit Systems come with essential accessories such as mounting brackets, spirit levelers for proper installation, and separate rope access and rescue pulleys.
- **Reliable Construction**: KARAM Davit Systems are built with durability and strength in mind, ensuring long-lasting performance in demanding work environments.

H-BASE DAVIT

II 2 G

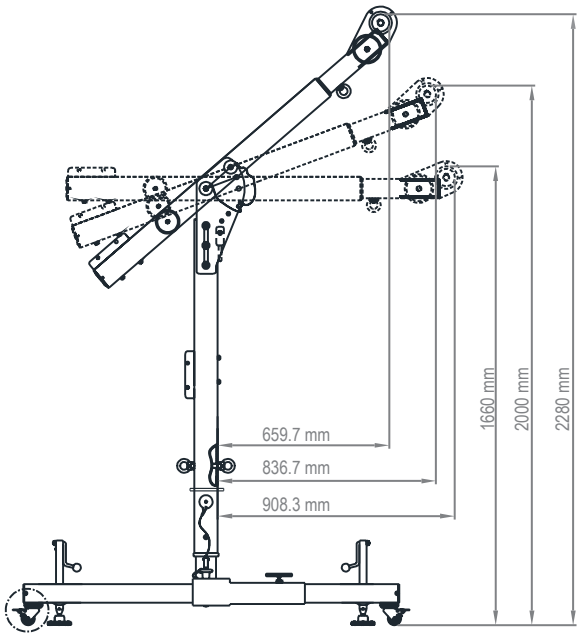
AS/NZS 5532:2013 EN 795:2012 Type B

Ref. DA 01

KARAM Davit Arm is specially designed for confined space entry/rescue applications. It is ideal for providing portable, safe overhead anchorage in large confined areas like manholes, storage tanks etc. It also allows the user to adjust the height accordingly for overhead clearance restrictions.

***Scan here** for a virtual tour of the product*







Ref. SA 17(26)
Universal Mounting Bracket for mounting Retrieval Blocks
**to be purchase separately*

PARTS OF H-BASE DAVIT



H-Base sub assembly complete for Davit
Ref. DA01 (SUB3)



Lower Mast (54 Inch)
Ref. DA01 (SUB4)



Lower Mast (36 Inch)
Ref. DA01 (SUB5)

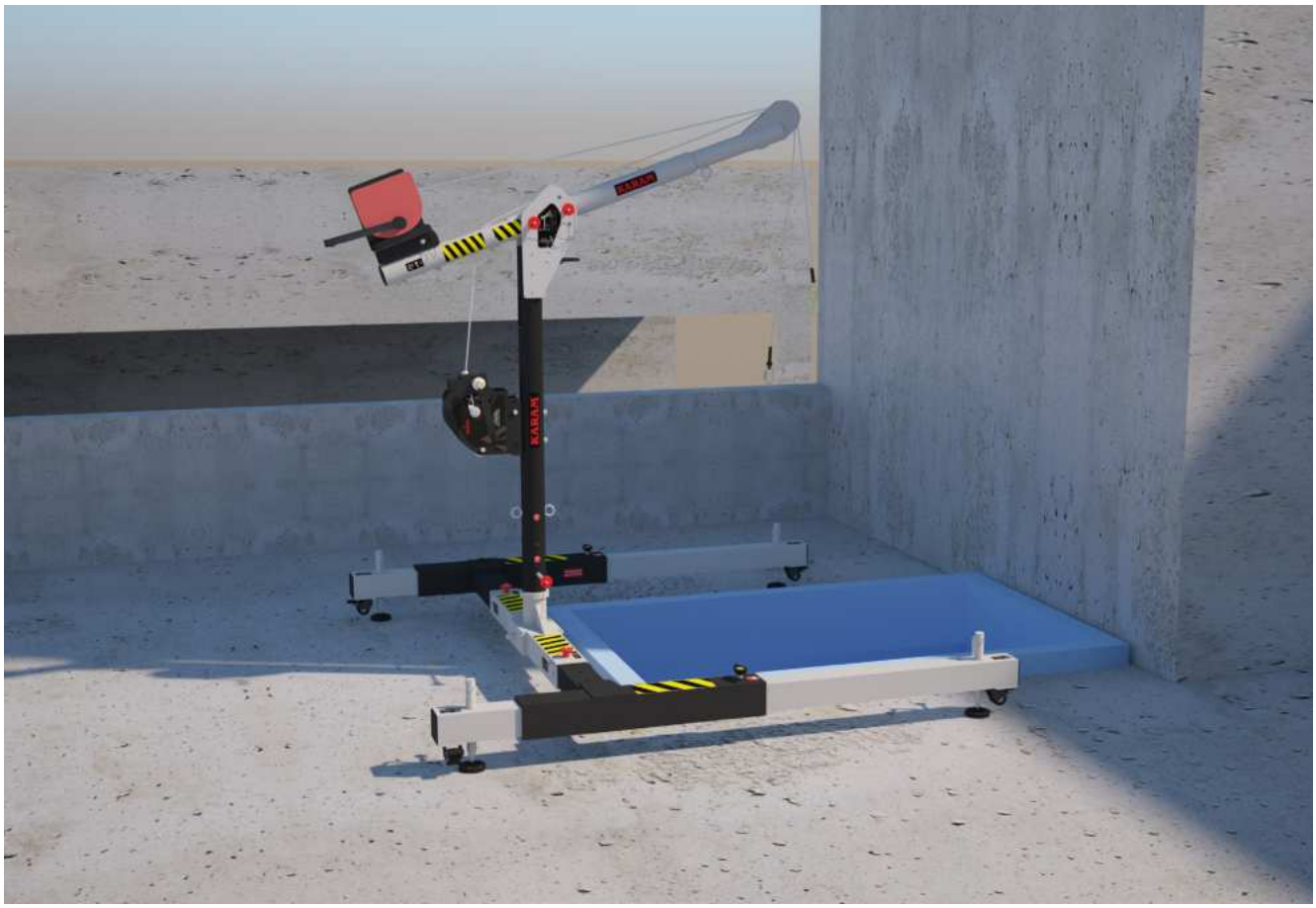


Upper Offset Mast(boom)
Ref. DA04 (06)

	Technical Snapshot					
Ref.	**Material**	**Min.-Max. Opening of H Base**	**Max. Load Capacity**	**Finish**	**Weight**	**Certified t**
DA 01	High strength and durable Aluminium Alloy	Ø1100mm - Ø1510mm	500 kg	Powder Coated	62.56kgs ± 0.10kgs	EN 795:2012 Type B TS 16415:2013 Type B Atex 2014/34/EU

GENERAL FEATURES

- DA 01 system is designed with five components that can be easily stored, transported, and set up without the need for tools.
- Its modular design allows for the use of various fixed and portable bases, as well as an optional mast with extensions.
- The Upper Mast Offset (Boom) of the system offers three adjustment positions, allowing users to adjust the height according to their requirements. Additionally, the system features foldable legs, making transportation and installation convenient.
- For rescue purposes, the DA 01 system includes multiple anchorage points. These points provide options for securing and rescuing individuals in need.
- One of the notable features of the system is its inbuilt swivel capability. By removing the locking pins provided to secure the lower mast and H-Base, the Davit lower mast assembly can be rotated up to 360°, even while under load.
- To ensure proper installation, a spirit leveller is included in the base assembly. This allows users to check the accuracy of the surface level and ensure that the davit is balanced during installation.
- For easy installation of a winch and retrieval, the DA 01 system comes with two pre-installed lower mounting bracket assemblies. These assemblies facilitate the installation of compatible KARAM Winches PN 801(DP), PN 817(DP), PN 818(C)(DP), PN 818(DP), and PN 818SR(DP) and Retrieval Blocks PCGS 20R(N) and PCGS 30R.
- In order to mount the retrieval block on the lower mast, the system includes a bracket lower assembly. This assembly can be used in conjunction with the universal mounting bracket SA 17(26).
- Certified to EN 795:2012 Type B, Atex 2014/34/EU and AS/NZS 5532:2013.



NEW

II 2 G

AS/NZS 5532:2013 EN 795:2012 Type A

FLOOR MOUNTED DAVIT

Ref. DA 02



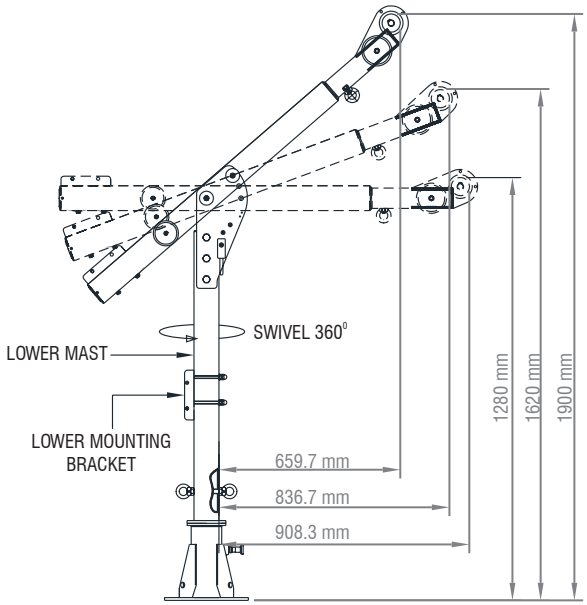
WALL MOUNTED DAVIT

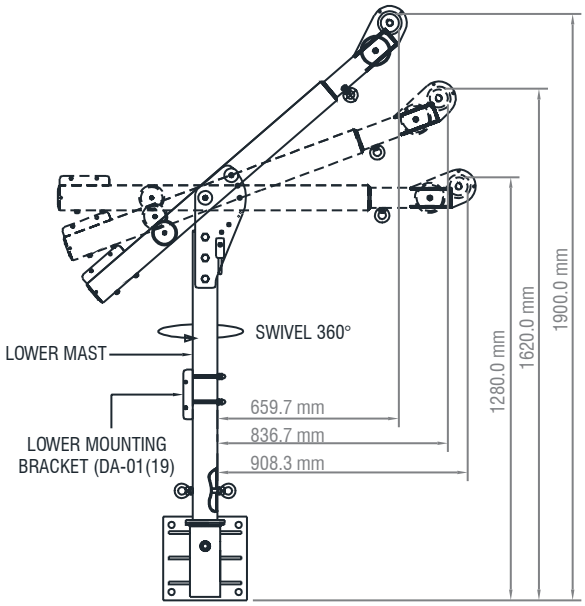
Ref. DA 03





Ref. SA 17(26)
Universal Mounting Bracket for mounting R
**to be purchase separately*





PARTS OF FLOOR AND WALL MOUNTED DAVIT



Floor Mounting Bracket
Ref. PN 900(01)



Wall Mounting Bracket
Ref. PN 900(02)



Lower Mast (54 Inch)
Ref. DA01 (SUB4)



Lower Mast (36 Inch)
Ref. DA01 (SUB5)



Upper Offset Mast(boom)
Ref. DA04 (06)

Technical Snapshot

Ref.	Material	Maximum Load Capacity	Finish	System Strength	Weight
DA 02	High strength and durable Aluminium Alloy	500 kgs	Powder Coated	21kN	53.87kgs ± 0.10kgs
DA 03					54.41kgs ± 0.10kgs

GENERAL FEATURES

- The Floor Mounted Davit (DA 02) and the Wall Mounted Davit (DA 03) are both designed to provide safe and secure access to confined spaces.
- Both Davits can be installed on various surfaces such as concrete, metal structures.
- Both Davits come with pre-installed lower mounting bracket assemblies DA-01/DA-01(19) to facilitate the installation of winches and retrieval systems, allowing for a complete confined space entry and exit system.
- Both Davits have multiple anchorage points for rescue purposes, providing versatility in rescue operations and enabling effective retrieval of personnel during emergencies.
- Special mounting brackets PN 900(01) for the floor and PN 900(02) for the wall ensure stable and secure attachment of the Davits, enhancing system safety.
- Both the Davits include a separate rope access and rescue pulley, as well as an anchor point designed for use with 10.5mm to 13.0mm kernmantle rope, expanding their functionality for rope access and rescue operations.
- The Davits DA02 and 03 are compatible with various KARAM Winches PN 801(DP), PN 817(DP), PN 818(DP), PN 818SR(DP) and Retrieval Blocks PCGS20R(N), PCGS30R for seamless integration into the safety system.
- The retrieval block can be mounted on the Davit lower mast using a lower bracket assembly and a universal mounting bracket SA-17(26), allowing for proper positioning during rescue and retrieval operations.
- Davits DA02 and 03 are certified to Atex 2014/34/EU and AS/NZS 5532:2013 standards, ensuring compliance with safety regulations.
- Conforms to EN 795:2012 Type A.





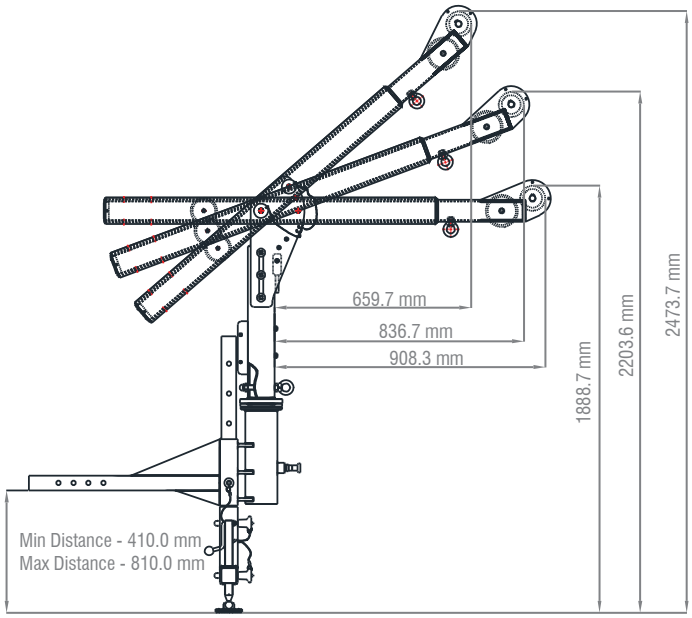
NEW

AS/NZS 5532:2013 EN 795:2012 Type E

HITCH MOUNTING DAVIT

Ref. DA 05







Ref. SA 17(26)
Universal Mounting Bracket for mounting R
**to be purchase separately*

PARTS OF HITCH MOUNTING DAVIT



Lower Mast
Ref. DA 05(Sub1)



Tow-Hitch
Ref. DA05(07)



Lower Mast (54 Inch)
Ref. DA01 (SUB4)



Upper Offset Mast(boom)
Ref. DA04(06)

Technical Snapshot					
Ref.	**Material**	**Maximum Load Capacity**	**Finish**	**System Strength**	**Weight**
DA 05	High strength and durable Aluminium Alloy	500 kgs	Powder Coated	21kN	56.54 kgs

GENERAL FEATURES

- The Hitch Mounting Davit (DA 05) is a portable fall arrest system that offers a safe and secure solution for accessing confined spaces where overhead support structures are not available.
- The Davit can be easily and quickly attached to a vehicle with a tow hitch. This allows for convenient transportation and deployment of the system.
- The system comes with a upper mast offset (boom) that offers three adjustment positions. Users can adjust the height of the arm according to their requirements, providing flexibility in different confined space situations.
- The Davit includes a foldable leg, which aids in transportation and installation. The leg can be folded when not in use, making it easier to store and carry the system.
- The Hitch Mounting Davit is compatible with specific KARAM winches, such as PN 801(DP), PN 817(DP), and PN 818(DP). It is also-compatible with retrieval blocks PCGS20R(N), and PCGS30R. Each of these devices has its respective mounting bracket (SA 17(26) for secure attachment to the Davit.
- The trailer hitch mount of the Davit is designed to fit into a 2” (51.0mm) hitch receiver. This allows the system to be attached to any vehicle with a compatible hitch receiver, providing a portable anchor point for confined space entry, retrieval, rescue, and fall arrest operations.
- Certified to EN 795:2012 & TS 16415:2013 Type B



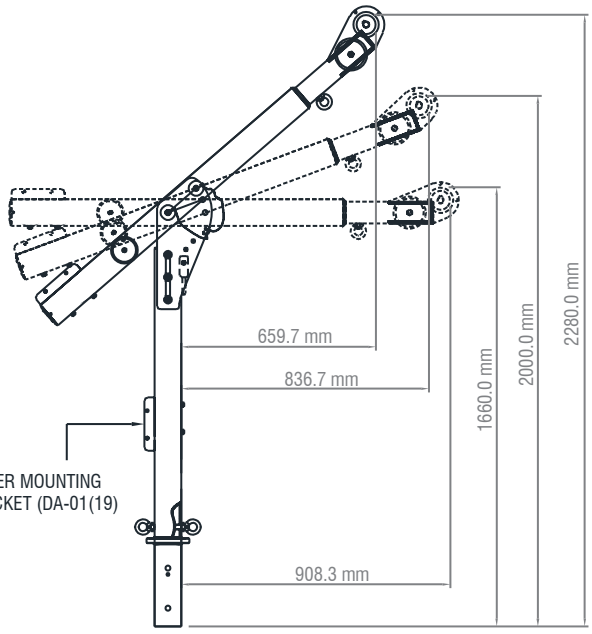
NEW

AS/NZS 5532:2013 EN 795:2012 Type A

FLUSH MOUNTED DAVIT

Ref. DA 06







Ref. SA 17(26)
Universal Mounting Bracket for mounting Retrieval Blocks
**to be purchase separately*

PARTS OF FLUSH MOUNTED DAVIT



Core Mounting Sleeve Assembly
Ref. DA 06 (SUB1)



Core Mounting Sleeve Assembly
Ref. DA 06 (SUB1) EC



Lower Mast (54 Inch)
Ref. DA01 (SUB4)



Lower Mast (36 Inch)
Ref. DA01 (SUB5)



Upper Offset Mast(boom)
Ref. DA04 (06)

Technical Snapshot						
Ref.	**Material**	**Drilling dia recommended**	**Maximum Load Capacity**	**Finish**	**System Strength**	**Weight**
DA 06	High strength and durable Aluminium Alloy	112mm dia. upto 274mm deep	500 kgs	Powder Coated	21kN	32.78kgs

GENERAL FEATURES

- The DA 06 system you described is designed to provide overhead anchorages in large holes of confined spaces.
- The DA 06 system comes with two pre-installed lower mounting bracket assemblies (DA-01(19)), making it easy to install winches and retrieval devices on the Davit. This simplifies the setup process and ensures compatibility with the equipment.
- The system includes multiple anchorage points, which are useful for rescue purposes. These points allow for the connection of various fall protection devices or rescue equipment, enhancing safety during confined space operations.
- The Davit lower mast assembly of the DA 06 system is equipped with an inbuilt swivel feature. This enables the rotation of the column assembly even under load, with a range of up to 360°. Locking pins are provided to secure the desired position.
- The system consists of a core mounting sleeve assembly, which is used for installation on concrete structures or preformed concrete casting. This involves drilling a hole with a diameter of 112 mm and a depth of up to 274 mm. The assembly provides a secure and stable anchor point.
- The DA 06 system is compatible with KARAM Winches PN 801(DP), PN 817(DP), PN 818(DP), PN 818SR(DP), and Retrieval Blocks PCGS20R(N) and PCGS30R. It also allows for the mounting of the Retrieval Block on the lower mast using the universal mounting bracket SA-17(26).
- Conforms to EN 795:2013 Type A.



NEW

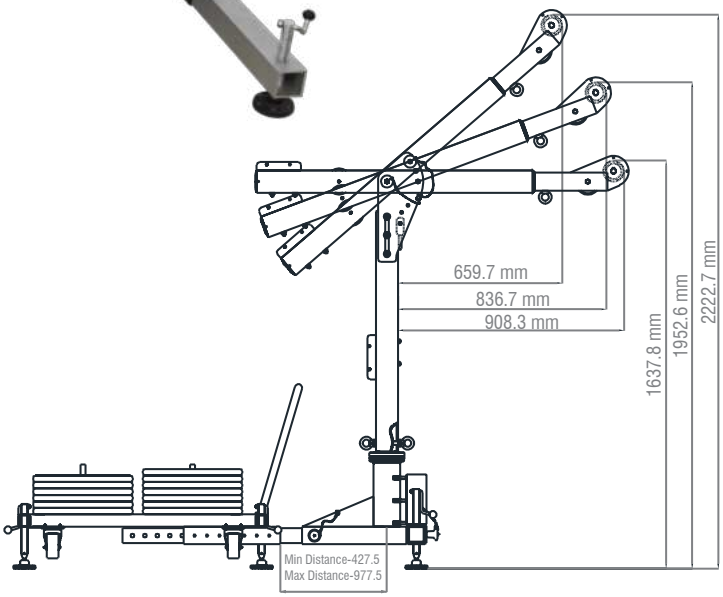
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EN 795:2012 Type E

FLUSH MOUNTED DAVIT

Ref. DA 07







Ref. SA 17(26)
Universal Mounting Bracket for mounting Retrieval Blocks
**to be purchase separately*

PARTS OF DEAD WEIGHT DAVIT



Trolley
Ref. DA 07SUB2



Dead Weight(26 Nos.)
Ref. DA 07(04)SUB2
650.0 kgs ± 0.20 kgs



Lower Mast (54 Inch)
Ref. DA01 (SUB4)

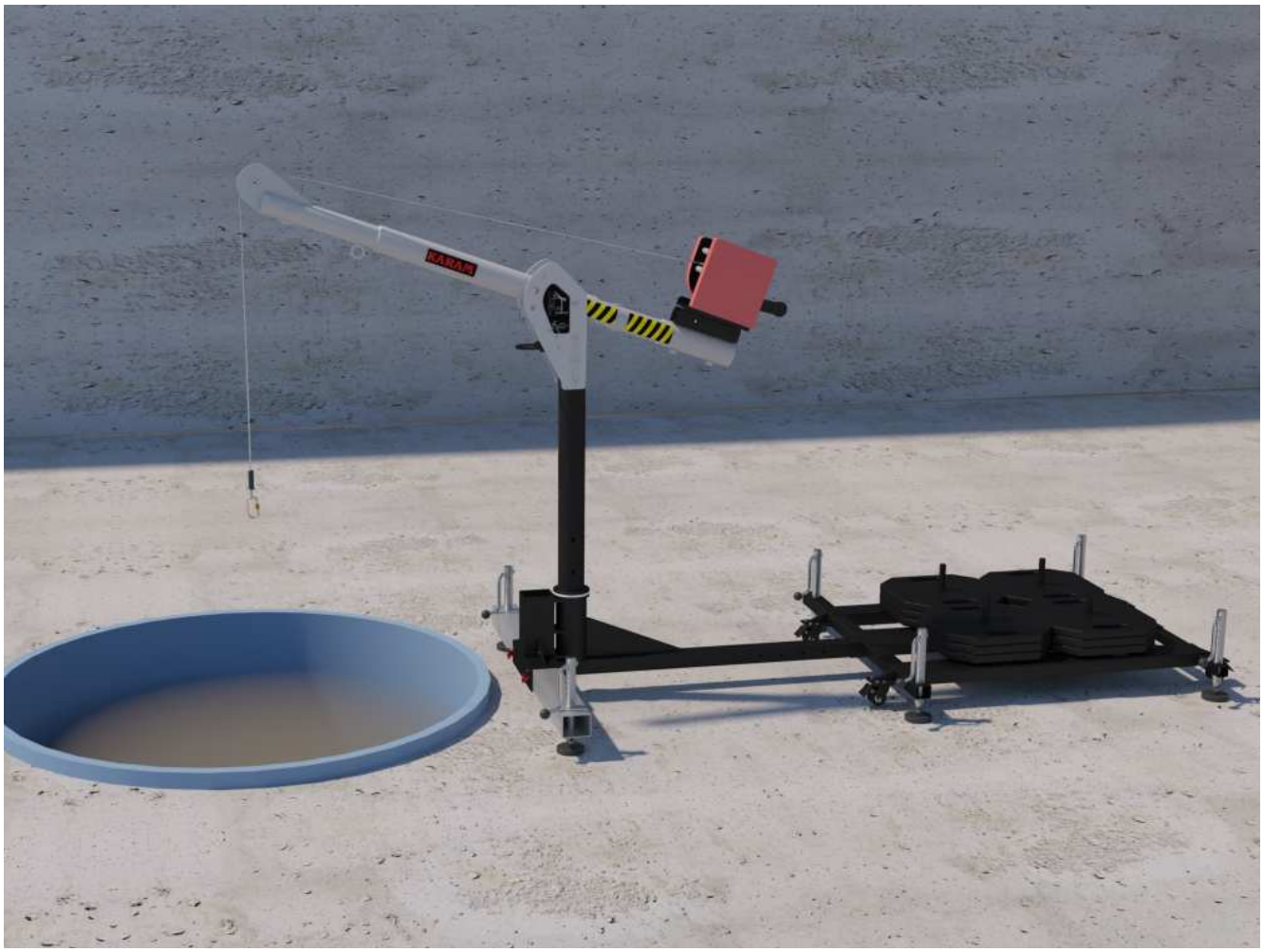


Upper Offset Mast(boom)
Ref. DA04 (06)

Technical Snapshot					
Ref.	**Material**	**Maximum Load Capacity**	**Finish**	**System Strength**	**Weight**
Ref. DA 07	High strength and durable Aluminium Alloy	500 kgs	Powder Coated	21kN	750kgs ± 0.20kgs including 650kgs dead weight

GENERAL FEATURES

- The Dead Weight Davit is a portable fall arrest system designed to provide a safe and secure means of accessing confined spaces where traditional overhead support structures and base grouting are not feasible.
- The system consists of a dead weight trolley with 650kgs dead weight plates (excluding trolley weight), providing stability during operation. This ensures that the system remains secure and steady during use.
- The Dead Weight Davit is designed to be compatible with specific KARAM Winches, including PN 801(DP), PN 817(DP), and PN 818(DP). It also works with Retrieval Blocks PCGS20R(N) and PCGS30R. Each of these components can be mounted using their respective mounting bracket SA 17(26).
- The system is equipped with wheels on the trolley, making it easy to move from one location to another. This allows for flexibility and convenience when working in different areas.
- The upper mast offset (boom) of the Dead Weight Davit comes with three adjustable positions, enabling the user to set the height according to the specific requirements of the task or confined space being accessed.
- The trolley is equipped with a height adjuster, which ensures proper stability of the anchor post during operation. This feature enhances safety and security while working at heights.
- Certified to EN 795:2012 Type E.



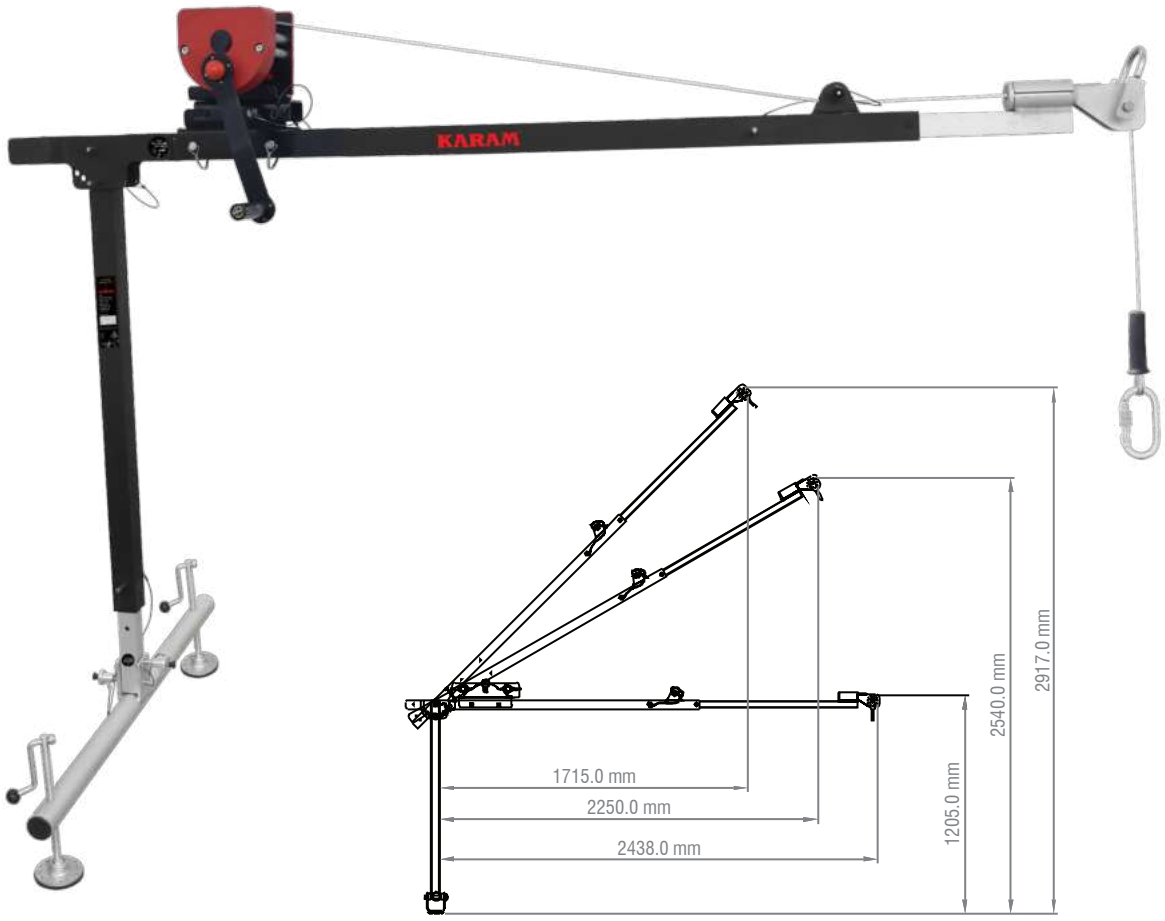
NEW

II 2 G

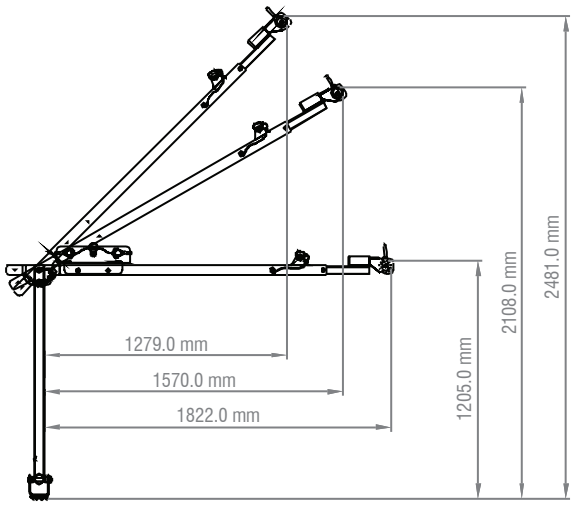
AS/NZS 5532:2013 EN 795:2012 Type A

FLUSH MOUNTED DAVIT

Ref. DA 08



FULL EXTENSION POSITIONS



MINIMUM EXTENSION POSITIONS



Ref. SA 17(26)
Universal Mounting Bracket for mounting Retrieval Blocks
**to be purchase separately*

PART OF EXTENDABLE POLE HOIST DAVIT

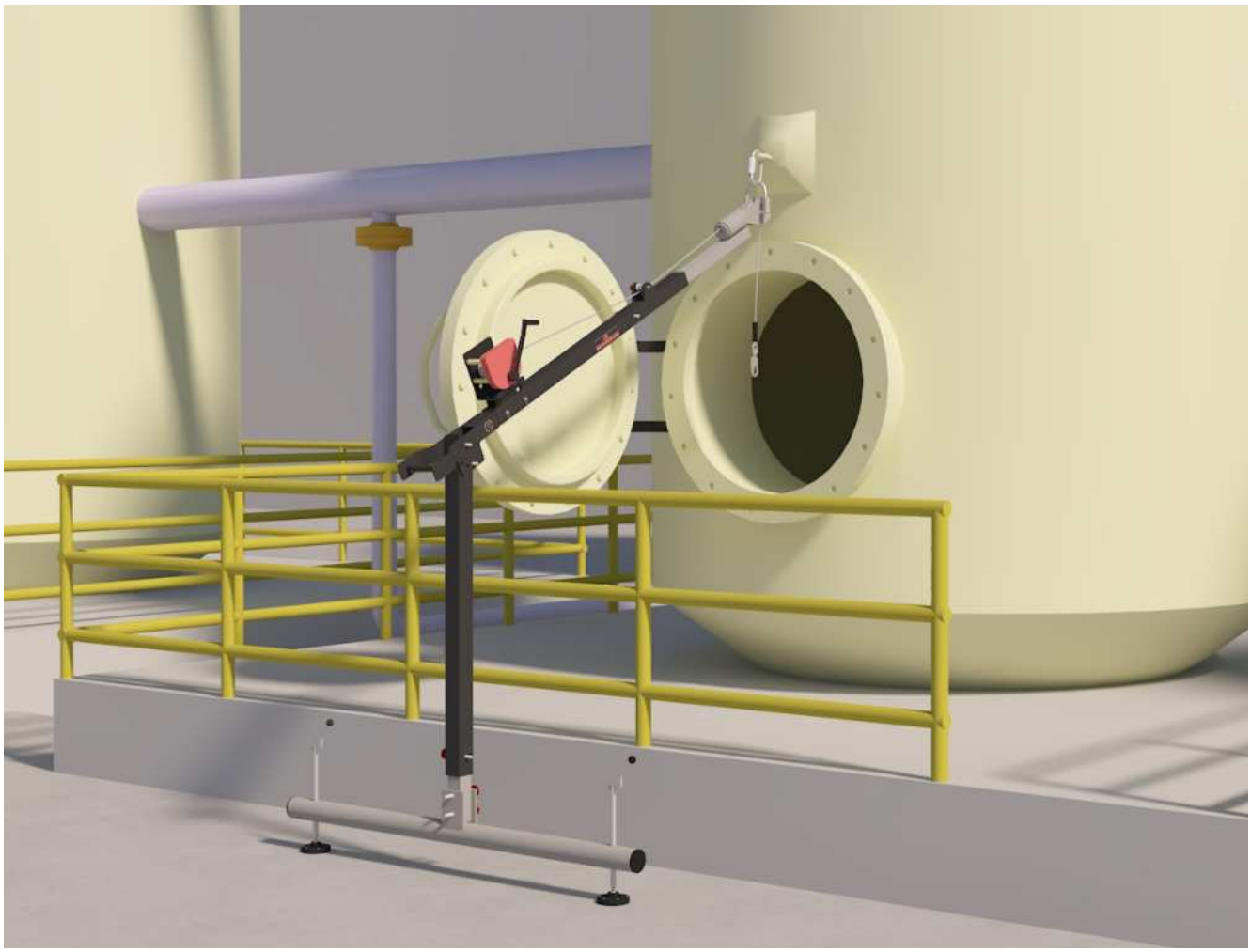


POLE HOIST DAVIT ANCHOR
DA 08 (10)

Technical Snapshot					
Ref.	**Material**	**Maximum Load Capacity**	**Finish**	**System Strength**	**Weight**
Ref. DA 08	High strength and durable Aluminium Alloy	500 kgs	Powder Coated	15kN	13.19kgs ± 0.10kgs

GENERAL FEATURES

- The Davit system has three adjustment points, allowing it to be used in various locations where the anchor point is at a low level. This flexibility enables the system to adapt to different work environments.
- The end of the upper mast offset (boom) of the Davit system is equipped with an inbuilt swivel feature. This allows for rotation and movement, providing enhanced manoeuvrability during operations.
- The Upper mast offset (boom) of the system comes with three adjustable positions, allowing the user to adjust the height according to specific requirements. This adaptability ensures optimal positioning for the task at hand.
- The base of the Davit system is equipped with swivel pads. These pads help ensure balance and stability during installation, enhancing the safety and effectiveness of the system.
- The Davit system comes with preinstalled mounting brackets that are compatible with KARAM winches, including PN 801(DP), PN 817(DP), and PN 818(DP). It also works with Retrieval Blocks PCGS20R(N) and PCGS30R. Each of these components can be mounted using their respective mounting bracket SA 17(26).
- The Davit system is designed to be used in both vertical and horizontal confined space entries. This versatility makes it suitable for various confined space applications where a regular anchorage system may not be feasible due to limited height constraints or specific entry
- requirements.
- Comes with anchor point DA 08(10) to be used to access the side entry vessels and tanks.
- Conforms to EN 795:2012 Type A.



WINCHES



Ref. PN 801(DP)



Ref. PN 801(40)(DP)



Ref. PN 817(DP)



Ref. PN 818(C)(DP)



Ref. PN 818(DP)



Ref. PN 818(SR)(DP)

Technical Snapshot					
Ref.	**Winch line material**	**Length of cable**	**Connector**	**Compatibility**	**Conforms to**
PN 801(DP)	Galvanized Steel Wire Rope of dia 4.5mm	20.0m and 25.0m	Steel Screw Locking Karabiner PN 112	Can be mounted on Megapod, Tripods and K-pod with the help of their universal mounting brackets respectively.	**EN 1496:2017 Class A Atex 2014/34/EU**
PN 801(40)(DP)		40.0m			
PN 817(DP)		20.0m	Steel Swivel Snap Hook PN 162		
PN 818(C)(DP)	Kernmantle Rope of dia 10.5mm	As per request	As per request	Can be mounted on Tripods.	**EN 1496:2017 Class B Atex 2014/34/EU**
PN 818(DP)	Galvanized Steel Wire Rope of dia 6.0mm	35.0m	Steel Swivel Snap Hook PN 162	Can be mounted on Tripods, Megapods, Davit Arm and K-Pod.	
PN 818(SR)(DP)	Synthetic Rope of dia 6.0mm	35.0m			**EN 1496:2017 Class B**

*Winch line material also available in Stainless Steel Wire Rope

ROPE ACCESS AND RESCUE



Rope Access technique of movement on a rope would only be used when traditional access systems cannot be installed. The basic Rope Access equipment should be used with a Fall Protection System. Rescue technique is used in an emergency, so it is naturally the most sensitive. This intervention can either be performed by the user him/herself, if he/she is conscious and has the necessary equipment for self-extraction, or by a helper. In this situation, it is necessary to be able to reach the victim, release him/her in complete safety and move the person upwards or downwards.

Types of Knots and their Usage

Type of Knot	Usage	Advantages	Picture of Knot
Figure of 8	• For belay setups during mountaineering, for rescue, or as a backup for ascending the rope.	• One of the strongest knots. • Secure, non-slip knot. • Can be tied with gloves on. • Easy to Inspect.	
Bunny Knot	• Can be used to attach to a victim so that he/she may be pulled in an upright position when connecting to both ventral and sternal harness attachment points. • The double loop at the end of the rope enables the knot to attach to two separate anchors and can equalize the force on both.	• Can be tied with gloves on. • Easy to Inspect.	
Alpine Butterfly	• To be used in conjunction with a Figure of 8 in the middle of the rope to form a fixed loop. • Suitable for multi-directional loading, isolating damaged sections of the rope.	• Forms stable, secure loop after initial setting. • Easy to untie after loading. • Size of the loop can be adjusted more easily. • Easy to Inspect. • Can be tied with gloves on.	

Testing



STATIC TEST OF PULLEY

TESTED & CERTIFIED

ANSI CE UIAA



Installation Steps



Scan here for a virtual tour of the product

GRIP DESCENDER

Ref. PN 401

IDEAL FOR USE

For descent on a single rope.

GENERAL FEATURES

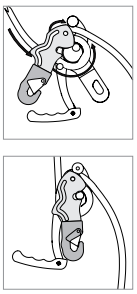
- It is equipped with a unique self-braking system that initiates the brake as soon as the handle is released or clasped too tightly.
- Equipped with polymer-coated cover to protect the user from the heat generated during descent.

CE

EN 341:2011 Type 2 Class A
EN 12841:2006 Type C



Installation Steps



Scan here for a virtual tour of the product

DESCENDER - JUMPER

Ref. PN 410

IDEAL FOR USE

For ascent and descent on a single rope.

GENERAL FEATURES

- Equipped with a unique self-braking system that initiates the brake a soon as the handle is released or clasped too tightly.
- It is provided with a safe locking eye which prevents the rope from sliding out when operating as a descender.
- Has polymer-coated cover for comfort and ease during descent.

CE

EN 341 Type 2 Class B
EN 12841:2006 Type C

Technical Snapshot					
Ref.	**Material**	**Works on**	**Weight**	**Finish**	**Certified t**
PN 401	Aluminium Alloy	10.0mm - 12.0mm dia Kernmantle Rope as per EN 12841:2006 Type C and on 11.0mm dia Kernmantle Rope as per EN 341:2011 Type 2 Class A	340.0gm	Coloured, Anodized	EN 341:2011 Type 2 Class A EN 12841:2006 Type C
PN 410		10.5mm-12.0mm dia Kernmantle rope for EN 12841:2006 Type C and on 11.0mm dia Kernmantle Rope as per EN 341:2011 Type 2 Class B	440.0gm		EN 341 Type 2 Class B EN 12841:2006 Type C

Example of Application





FIGURE OF 8

Ref. PN 431

IDEAL FOR USE

As a component of a rope descent system.

CONFORMS TO

EN 15151-2:2012

Technical Snapshot							
Ref.	**Material**	**Inner dia**	**Height**	**Weight**	**Minimum breaking strength**	**Weight holding capacity**	**Finish**
PN 431	Aluminium Alloy	Big: 52mm Small: 26mm	145mm	136.0gms	50 kN	Upto 136.0kgs	Natural Silver, Coloured, Anodized

Example of Application





ROPE CLAMP

Ref. PN 402(L), PN 402(R)

IDEAL FOR USE

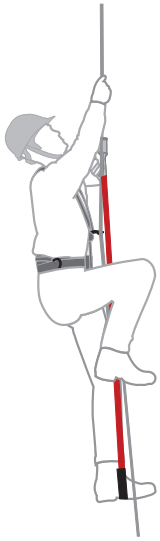
During ascent and occasionally for hauling.

CE

EN 567:2013
EN 12841:2006

Technical Snapshot					
Ref.	**Material**	**Weight**	**Works on**	**Finish**	**Certified t**
PN 402(L) **PN 402(R)**	Aluminium Alloy	195.0gms	10.0mm to 12.0mm dia Kernmantle Rope	Coloured, Anodized	EN 567:2013 EN 12841:2006

Example of Application





ADJUSTABLE WEBBING FOOT LOOP

Ref. PN 402(A)

IDEAL FOR USE

With ascending Rope Clamp for rope ascents.

GENERAL FEATURES

- Material: 44mm polyester webbing.
- Underfoot strap is abrasion-resistant and is slightly rigid to make it easier to step into.
- Length easily adjusted with the combination buckles.



WEBBING COW'S TAIL

Ref. PN 401(W)(25)

- It is made of polyester webbing of length 20 cm having loops for attachment.
- Certified to EN 354:2010

IDEAL FOR USE

To anchor a victim of fall to the rescuer during rescue.



ROPE CLAMP

Ref. PN 405

IDEAL FOR USE

During ascent and occasionally for hauling.

GENERAL FEATURES

- Easy connection on user Harness by webbing strap or a connector.
- Can be attached to a Kernmantle Rope and will lock under load in one direction and slip freely in opposite direction.

CE

EN 567:2013
EN 12841:2006

Technical Snapshot					
Ref.	**Material**	**Weight**	**Works on**	**Finish**	**Certified t**
PN 405	Aluminium Alloy	157.0gms	10.0 to 12.0mm dia Kernmantle Rope	Coloured, Anodized	EN 567:2013 EN 12841:2006

RIGGING PLATE

KARAM Rigging Plate is designed to organize and provide multiple anchor points in multiple directions for superior versatility. Eye of the plate can be connected to the Karabiners with diameter of 19mm.

CE
VG 11 CNB/P/11.114

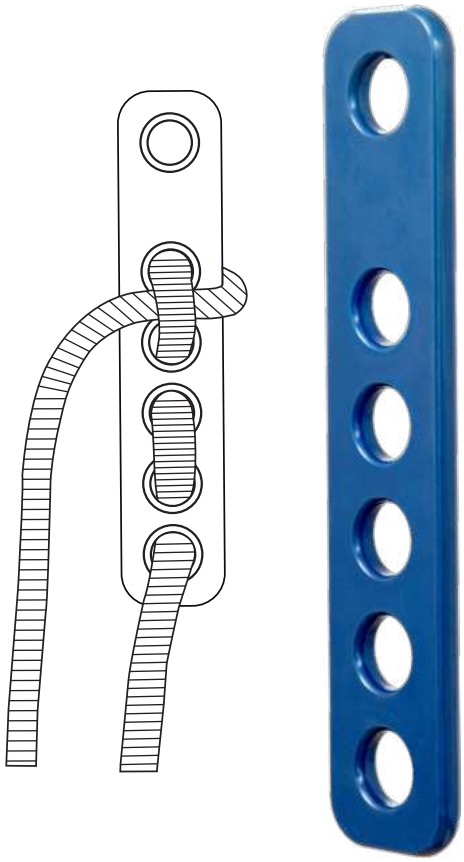
Ref. PRP01



Ref. PRP02



Technical Snapshot					
Ref.	**Material**	**Weight**	**Minimum Breaking Strength**	**Finish**	**Certified t**
PRP01	Aluminium Alloy	53.5gms	45kN	Natural Silver / Coloured Anodized	VG 11 CNB/P/11.114
PRP02		210.0gms			



ROPE TERMINATION ANCHOR

Ref. ARC 04

Rope Termination Anchor is an ideal choice to terminate 16mm textile rope lifelines. It is used to integrate an anchorage connector with a Vertical Lifeline System.

APPLICATION

Is best suited for constructions, manufacturing, spray painting, welding, mining, oil and gas, chemical, electric utility, telecommunications, general industry, automotive, scaffolding etc.

GENERAL FEATURES

- Light in weight.
- Extremely easy to use. This Anchor has a total of six holes. The top hole constitutes the connection point to the anchorage. The rope is threaded in the other five holes. It has to be connected to an anchor point using an Auto Locking Karabiner.
- Eliminates the need for Knots, splicing or swaging.
- Provides convenient lifeline connection point.
- Allows installations without a traditional anchorage point.
- Is reusable.
- Stays tight, while always remaining simple to untie.

Technical Snapshot					
Ref.	**Material**	**Weight**	**Minimum Breaking Strength**	**Finish**	**Certified t**
ARC 04	Aluminium Alloy	248.5gms	23kN	Natural Silver / Coloured Anodized	VG 11 CNB/P/11.114

CE
VG 11 CNB/P/11.114

PULLEYS



STEEL SINGLE PULLEY SINGLE SIDE ATTACHMENT

Ref. AP 001



STEEL SINGLE PULLEY DOUBLE SIDE ATTACHMENT

Ref. AP 002



ALUMINIUM SINGLE PULLEY SINGLE SIDE ATTACHMENT

Ref. AP 011



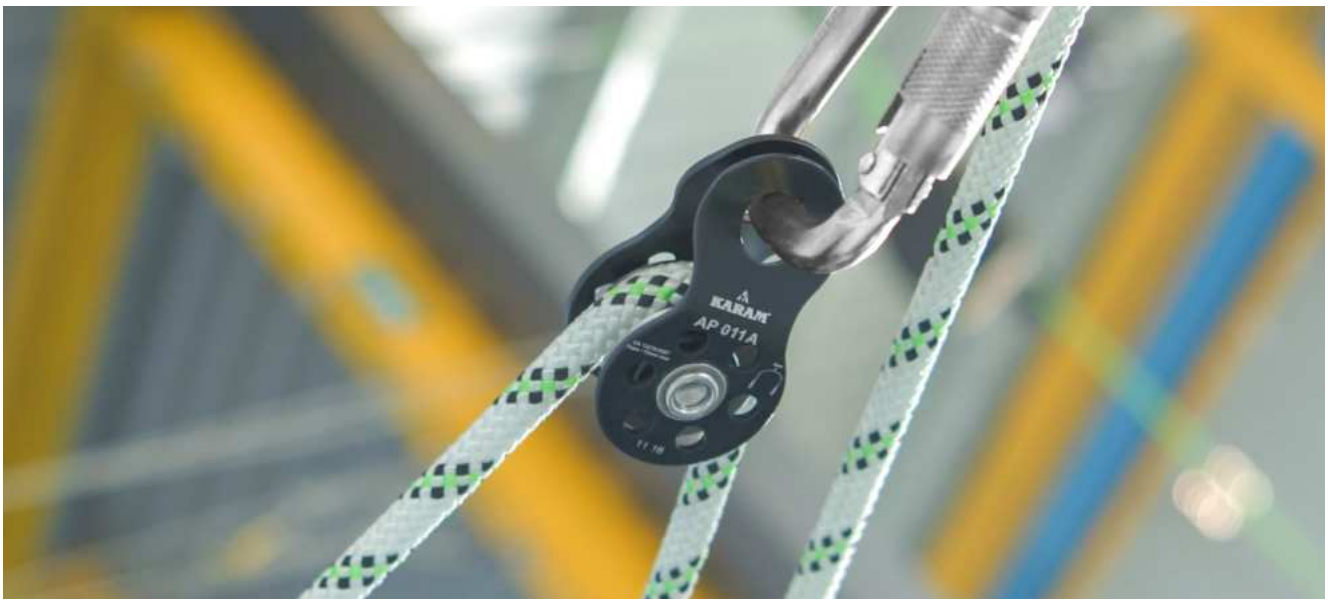
ALUMINIUM SMALL SINGLE PULLEY SINGLE SIDE ATTACHMENT

Ref. AP 011A

UIAA EN 12278:2007

Technical Snapshot						
Ref.	**Material**	**Works on**	**Weight**	**Minimum Breaking Strength**	**Finish**	**Certified t**
AP 001	Alloy Steel	Rope of dia 12.0mm	412.0gms	30kN	Natural Silver	NA
AP 002			500.0gms			
AP 011	Aluminium Alloy		90.0gms		Natural Silver / Coloured Anodized	EN 12278:2007
AP 011A	Aluminium Alloy/ Stainless Steel		165.0gms			EN 12278:2007 UIAA 127

Example of Application



EN 12278:2007



ALUMINIUM SINGLE PULLEY SINGLE SIDE ATTACHMENT

Ref. AP 012



ALUMINIUM DOUBLE PULLEY DOUBLE SIDE ATTACHMENT

Ref. AP 013



ALUMINIUM SINGLE PULLEY DOUBLE SIDE ATTACHMENT

Ref. AP 014

Technical Snapshot						
Ref.	**Material**	**Works on**	**Weight**	**Minimum Breaking Strength**	**Finish**	**Certified t**
AP 012	Aluminium Alloy	Rope of dia 16.0mm	234.0gms	36kN	Natural Silver / Coloured Anodized	EN 12278:2007
AP 013			418.5gms			
AP 014			275.0gms			

ABOVE PULLEYS ARE AVAILABLE IN 3 DIFFERENT VARIANTS AS UNDER

EN 12278:2007

Technical Snapshot				
Ref.	**Bearing Type**	**Sheave Material**	**Weight**	**Certified t**
AP 012(BB)	Ball Bearing	Aluminium Alloy	290.0gms	EN 12278: 2007
AP 012(SS)(BB)	Ball Bearing	Stainless Steel	410.0gms	
AP 012(SS)	Dry Bearing	Stainless Steel	430.0gms	
AP 013(BB)	Ball Bearing	Aluminium Alloy	520.0gms	
AP 013(SS)(BB)	Ball Bearing	Stainless Steel	770.0gms	
AP 013(SS)	Dry Bearing	Stainless Steel	810.5gms	
AP 014(BB)	Ball Bearing	Aluminium Alloy	330.0gms	
AP 014(SS)(BB)	Ball Bearing	Stainless Steel	450.0gms	
AP 014(SS)	Dry Bearing	Stainless Steel	471.0gms	

UIAA EN 12278:2007



DOUBLE TANDEM PULLEY BIG WITH SS SHEAVES

Ref. AP 015



II 2 G

DOUBLE TANDEM PULLEY SMALL WITH SS SHEAVES

Ref. AP 016



DOUBLE TANDEM PULLEY SMALL WITH MANGANESE BRONZE SHEAVES

Ref. AP 016A



ALUMINIUM DOUBLE PULLEY DOUBLE SIDE ATTACHMENT

Ref. AP 017(SS)(BB)



ALUMINIUM SINGLE PULLEY DOUBLE SIDE ATTACHMENT

Ref. AP 025

Technical Snapshot

Ref.	Material	Works on	Weight	Minimum Breaking Strength	Finish	Certified t
AP 015	Side cover: Aluminium Alloy Sheaves: Stainless Steel	Synthetic Rope / Wire of dia 16.0mm	820.0gms	40kN	Natural Silver / Coloured Anodized	EN 12278:2007 EN 795:2012 Type B
AP 016		Rope / Wire of dia 12.0mm	323.0gms			EN 12278:2007 ATEX 2014/34/EU UIAA
AP 016A	Side cover: Aluminium Alloy Sheaves: Manganese Bronze	Rope / Wire of dia upto 12.0mm	325.0gms			EN 12278:2007 EN 795:2012 Type B UIAA
AP 017(SS)(BB)	Side cover: Aluminium Alloy Sheaves: Stainless Steel	Rope of dia 12.0mm	262.0gms	25kN	Covers-Anodized sheaves-Polished	EN 12278:2007 UIAA
AP 025	Side cover: Aluminium Alloy Sheaves: Stainless Steel	Rope of dia 12.0mm	165.0gms	25kN	Covers-Anodized sheaves-Polished	EN 12278:2007 UIAA

NEW



RATCHET PULLEY SYSTEM

Ref. AP 018

GENERAL FEATURES

- Robust & durable plastic casing.
- Has swivel eye at anchorage end.
- Ratchet pulley designed to be used to form temporary vertical life line with ratchet pulley at one end and anchorage pulley at ground level.
- Compatible to make system of 3:1 & 5:1 for getting mechanical advantages.
- Dual braking system (clockwise and anti clockwise) for optimum safety while usage.
- Compatible with Ø10.5mm Kernmantle rope.

Technical Snapshot				
Ref.	**Material**	**Weight**	**Compatible with Rope**	**Certified t**
AP 018	Polymer Casing	850 gms±10.0gms	Kernmantle Rope of dia 10.5mm	EN 360:2002

OPTIONAL ACCESSORIES



Aluminium Single Pulley Single Side Attachment Ref. AP012

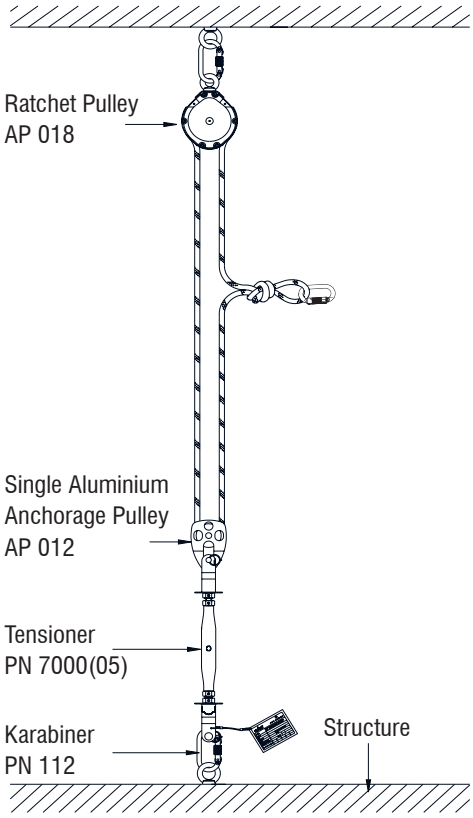


Karabiner Ref. PN 112



Tensioner Ref. PN 7000 (05)

Complete System





RATCHET HAULING SYSTEM

Ref. PN 411

IDEAL FOR USE

For rescuing the victim post fall arrest.

GENERAL FEATURES

- Loops provided on both the ends for making connections with the structure and other sub systems.
- Consists of ratchet locking system to allow motion in only one direction and locks in the other direction.

INSTALLATION

- Connect the Ratchet Hauling System to the structure with its one loop with means of a Connector / Karabiner at appropriate height.
- Connect the other loop of the Ratchet Hauling System to the victim with automatic Descender and a Connector.
- Now, the victim may be rescued with the help of hauling features of the device.
- Once the victim has been put fully on Ratchet Hauling System, primary Lanyard may be released.

Scan here *for a virtual tour of the product*

Technical Snapshot				
Ref.	**Material**	**Weight**	**Finish**	**Conforms to**
PN 411	Alloy steel	1.12kg	Galvanized steel in blue passivationw	**EN 1496:2017 Class A**

ACCESSORIES

KARAM also provides equipment which when used, aid in easy rescue and rope access operations.



Example of Application

SPREADER BAR

Ref. IMP 003

IDEAL FOR USE

- In conjunction with the KARAM Harness for raising and lowering a person during rescue.
- The attached webbing loops can be used to secure victim's arms when lifting or lowering.



PILOT CHAIR

Ref. IMP 005

IDEAL FOR USE

Vertical ascent and descent.

GENERAL FEATURES

- Ergonomic and comfortable working chair.
- Spreader Bar available as an optional accessory.
- **Conforms to EN 1498:1996.**



SPREADER BAR

Ref. IMP 005(01)

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



Example of Application



EVACUATION TRIANGLE

Ref. PN 852

IDEAL FOR USE

During rescue of injured personnel.

- Contains 3 metallic D-rings as attachment elements.
- **Conforms to EN 1498:2006.**





EASY SEAT

Ref. IMP 004

GENERAL FEATURES

- Ergonomical and comfortable working chair. Provides comfortable seating for an extended time during long hours of work, suspended at a height.
- Can be attached to Harnesses Magna 3, PN 56, PN 57, PN 61 and PN 62 having a central D-Ring at the waist level (Ventral) to which the Karabiner is attached.
- The aluminium reinforcement in the easy seat makes it robust yet light in weight, weighing not more than 1300 gms.
- The loops at the end of the polyester webbing straps can be easily attached to the Ventral D-ring of the Harnesses mentioned.
- Has adjustable straps.
- Equipped with 3 loops for hanging tools, bucket etc.
- Easy to position at the back when not in use.
- Soft cushioned sides prevent the webbing straps from cutting into the thighs.

Technical Snapshot						
Ref.	**Webbing**			**Metal components**		
IMP 004	Material	Width	Breaking strength	Material	Finish	Weight
	Polyester	44.0±1.0mm	23kN	Aluminium Alloy	Anodized	1.94kgs

KARAM RESPAC RECOVERY STRETCHER

Ref. PN 403

Scan here for a virtual tour of the product

The back-packable KARAM Respac Recovery Stretcher has been configured as an extremely flexible rescue system. It can be used in any situation where a patient needs to be transported. It is particularly effective in morphological and difficult climatic conditions for a fast recovery.

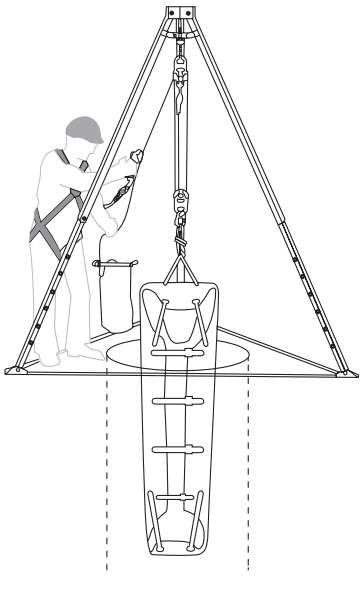


IDEAL FOR USE

For safe carriage and transportation of the wounded user.

GENERAL FEATURES

- Inert to all conditions, body fluids and blood.
- Highly durable, easy to use and store.
- Combination of optimum support and function.
- Can be used both vertically as well as horizontally.
- Comes with a special marking for identifying the head position of the victim when laid on the stretcher.
- Has instruction labels consisting of technical description,usage instructions, general guidelines, care and maintenance and inspection grid for giving more comprehensive information of the Stretcher to the user.



Example of Application



Technical Snapshot
Maximum load: 200kg Weight of device: 5.5kg Total weight with bag and belts: 8.0kg
Loading Surface
Length: 8.0ft. Width: 3.0ft. Material: High strength polymer Material of Hooks: Alloy steel
Rope
Length: 9.0m Dia: 10.0mm
Lifting Belts
Length: Feet zone 6.7 ft./ Head zone 6.4ft Width: Feet zone 5mm/ Head zone 5mm Maximum load belts: 3000 kg Maximum load Stitching: 2000 kg
Handles
Material: Polyester Number of handles on every longitudinal side: 2

EVAC-R

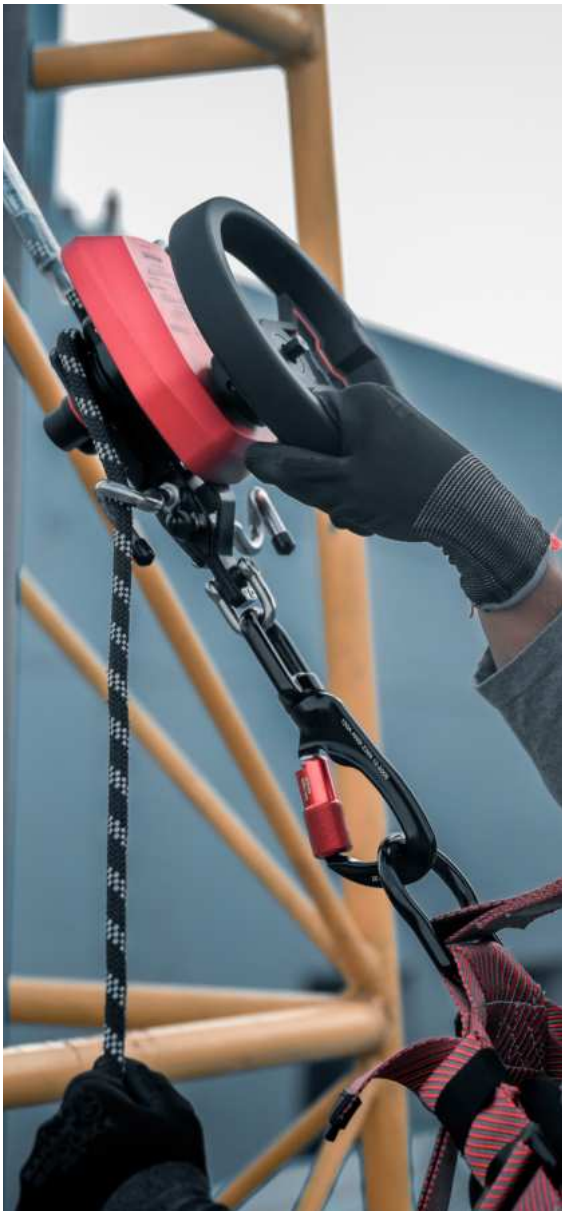
REF. PN 408N

NEW

EVAC-R is Ideal for evacuating multiple users through a shuttle system. It is the perfect device for lifting and rescue operations.

IS 3521(Part-9):2021 EN 341:2011-1A EN 1496:2007 B





**Please note that the Karabiner or the color of the body may differ from the-product image displayed. Nevertheless, this variation does not impact the product's functionality*

IDEAL FOR USE

An ideal equipment to perform rescue, descent and ascent activities

APPLICATION

Is best suited for crane rescue, telecom tower and electrical tower.

GENERAL FEATURES

- **Rope Termination:** Ends with double figure of 8 knots for connection with Karabiner.
- **Brake System:** Automatic and redundant.
- **Usable with Electric Screw driver:** For high ascents.
- **Maximum no. of users:** 3 users

Technical Snapshot

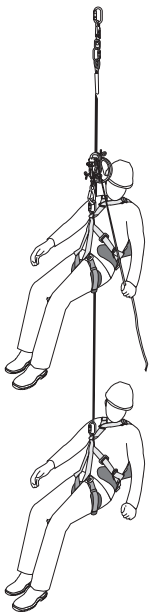
Material	Rope Dia	Max. Weight Capacity	Controlled Descent Speed	Maximum Descent Height	Certified t
Aluminium alloy and high-strength steel	As per EN 341: dia 10mm semi static kernmantle rope As per EN 12841: dia 9.6mm-11 mm semi static kernmantle rope	300 Kg (max 1x500 mtr)	• Approx. 1.0 m/s with weight up to 85kgs • Above 85Kgs the descent speed goes up to approx. 1.5 m/s • The above speeds can easily be controlled using the "Eye Bolts"	500 mtr.	EN 341: 2011-1 A (2 Persons) EN 341: 2011-1 B (3 Persons) EN 1496:2017-B EN 12841 Type C ANSI Z 359.4:2013 IS 3521(Part-9):2021

MULTIPLE USE OF EVAC-R

When EVAC-R is attached to the Harness:

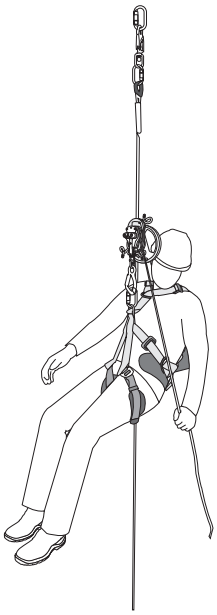
Rescue

Rescue can also be performed when EVAC-R is attached to the Harness of the user. Lift the victim, unhook from the fall arrest device and then descend using the EVAC-R



Descent

Using the tension in the rope while pulling it outward on one eye bolt, the device can be used for controlled descent. For positioning at the certain height this end of the rope is wound around both the eye bolt and the rope clamp of EVAC-R so that the worker can be locked in the required suspended position.

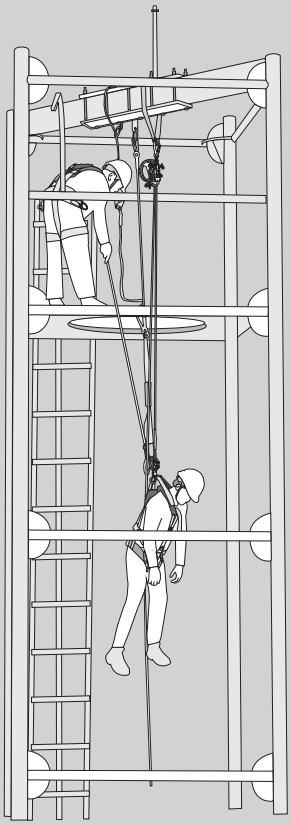


When EVAC-R is fixed to an anchor point

Rescue

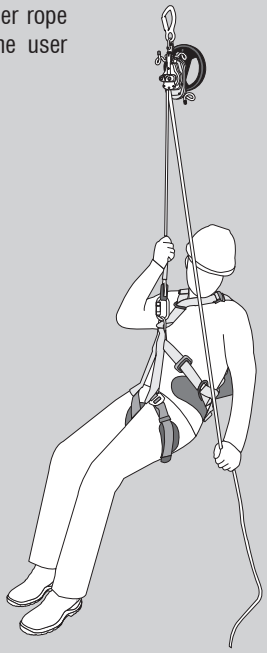
Rescue can be conducted when the user is unconscious using Telescopic Pole. The rescuer climbs down to the victim, connects him to his Harness, release the victim from his fall arrest system, and then they both descend down safely.

Stretcher (PN 403), Evacuation Triangle (PN 852) can also be used to rescue the victim.

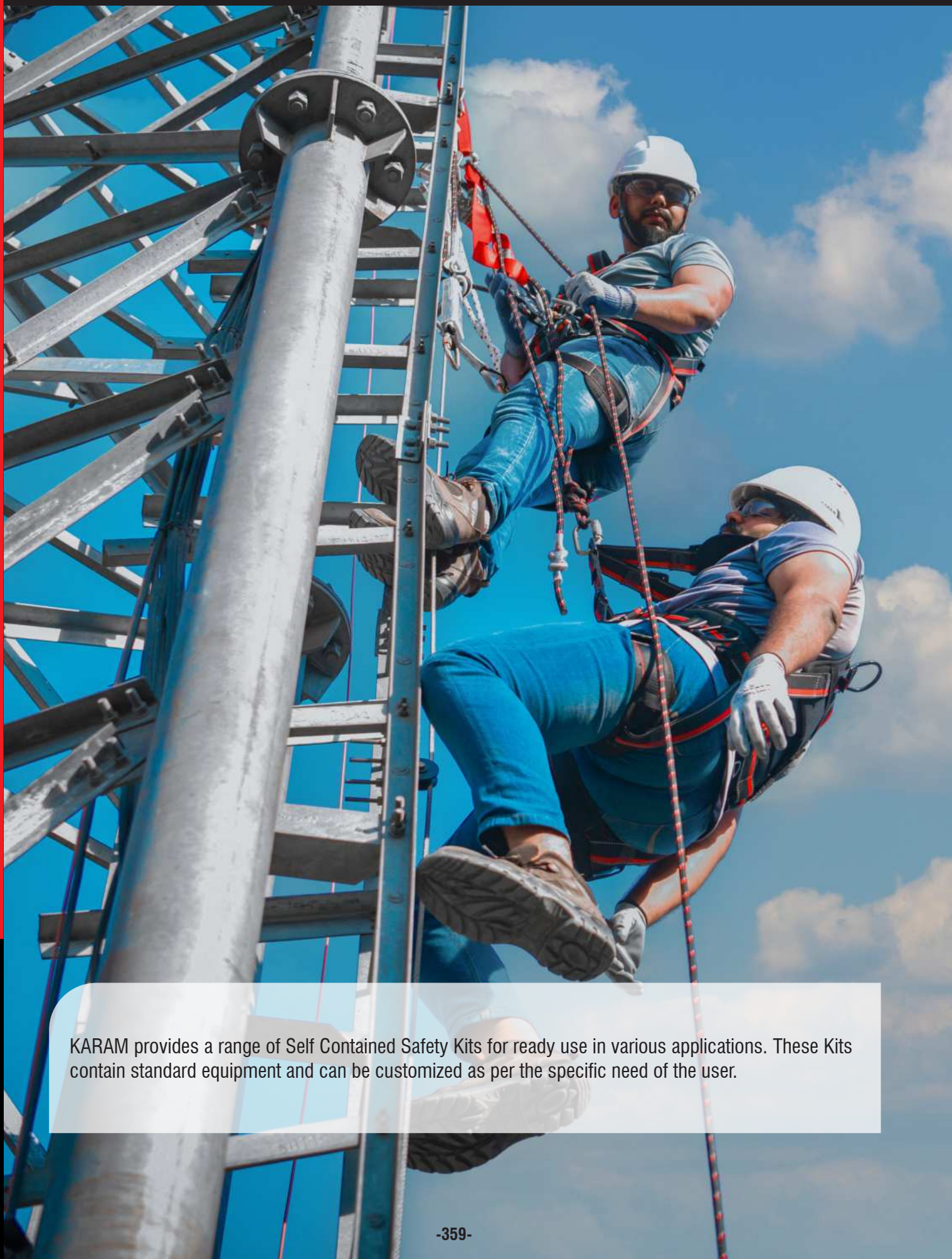


Descent

A User descends down with the other rope reaching the top or point where the user connects himself to decent down.



SELF CONTAINED SAFETY KITS



KARAM provides a range of Self Contained Safety Kits for ready use in various applications. These Kits contain standard equipment and can be customized as per the specific need of the user.

MAINTENANCE AND WINDOW CLEANING KIT

Ref. PN 651

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





TOWER HARNESS
PN 56



GRIP DESCENDER
PN 401 (113)



STEEL SCREW LOCKING KARABINER
PN 112 (2 Nos.)



ROPE GRAB FALL ARRESTER
PN 2000A (112C)



TOOL BAG
BG 12



SAFETY GLOVES
HS 61



KERNMANTLE ROPE ANCHORAGE LINE
PN 950 (KRKD11)(121)(50m)



TWISTED ROPE ANCHORAGE LINE
PN 950 (14mm)(50m)



CROSS ARM STRAP
PN 803 (1.2mtr)(2 Nos.)



DELUXE UNIVERSAL KIT BAG
BG 20

BASIC RESCUE KIT (ROPE ACCESS)

Ref. PN 652

KARAM Rescue Kit offers a complete and immediate solution for rescue of a victim of fall from height, as he lies suspended with his fall arrest equipment.

Scan here for a virtual tour of the product



TOWER HARNESS
PN 56



GRIP DESCENDER
PN 401 (113)



STEEL QUARTER TURN LOCKING KARABINER
PN 113 (6 Nos.)



SAFETY GLOVES
HS 61



ROPE GRAB BLOCKER
RG 07(113)



KERNMANTLE ROPE ANCHORAGE LINE
PN 950 (KRKD11)(121)(50m)(2 Nos.)



CROSS ARM STRAP
PN 803 (1.2mtr)(2 Nos.)



WORK POSITIONING LANYARD
PN 245 (2.0m)



KERNMANTLE ROPE EA FORKED LANYARD
PN 341N (1.5m)

CROSS ARM STRAP
PN 808



WEBBING COWS TAIL
PN 401W (25)



KNIFE



DELUXE UNIVERSAL KIT BAG
BG 63



TELECOM TOWER CLIMBING KIT

Ref. PN 653

This Kit is designed for the personnel engaged in working on a high rise tower with an extra provision of bigger Hooks and easily adjustable Lanyards to suit the requirement of the working individual.





TOWER HARNESS
PN 44



WORK POSITIONING LANYARD
PN 242 (2.0m)



KERNMANTLE ROPE EA FORKED LANYARD
PN 341N (1.5m)



TOOL BAG
BG 12



SAFETY GLOVES
HS 61



ROPE GRAB FALL ARRESTER
PN 2000A (112C)



TWISTED ROPE ANCHORAGE LINE
PN 950 (14mm)(121)(50m)



TWIN TOOLS LANYARD
TL02(N)



CROSS ARM STRAP
PN 803 (1.2mtr)(2 Nos.)



DELUXE UNIVERSAL KIT BAG
BG 20

CONFINED SPACE ENTRY/EGRESS KIT WITH TRIPOD

Ref. PN 654

This Kit is meant for personnel who are required to move into and for retrieval of personnel from Confined Spaces.



TOWER HARNESS
PN 56



TOOLS LANYARD
TL01(N)(2Nos.)



TRIPOD BAG
PN 904 (7ft) (BL)



WINCH
PN 801(DP)



RETRIEVAL FALL ARRESTER BLOCK
PCGS 20R(N)



SAFETY GLOVES
HS 61



TRIPOD
PN 800 (DP)(7ft)



MOUNTING BRACKET
PN 800(45)
for installing PCGS 20R on
PN 800 (DP)(7FT)



CONFINED SPACE ENTRY/EGRESS KIT WITH K-POD

Ref. PN 655

This Kit is meant for personnel who are required to move into Confined Spaces, using the KARAM Cantilever K-Pod.





TOWER HARNESS
PN 56



TOOLS LANYARD
TL01(N)(2Nos.)



K-POD BAG
PN 904 (7ft) (BL)



WINCH
PN 801(DP)



RETRIEVAL FALL ARRESTER BLOCK
PCGS20R(N)



STEEL QUARTER TURN LOCKING KARABINER
PN 111



SAFETY GLOVES
HS 61



CANTILEVER K-POD
PN 900



MOUNTING BRACKET
PN 900(07)
for installing PCGS 20R on
PN 900

HAULING AND LOWERING RESCUE KIT

Ref. PN 661

KARAM introduces Hauling Rescue Kit specifically designed for rescuing a suspended casualty by using Fall Arrest Lanyards, Rope Safety Lines and Fall Arrest Blocks, all possible from a point of safety. The Kit is provided with 3m long Rescue Pole for extension to the fall victim, and hence does not require the rescuer to descend towards the victim.



TOWER HARNESS
PN 56



ALUMINIUM DOUBLE PULLEY DOUBLE SIDE ATTACHMENT
AP017(SS)(BB)(2 Nos.)



STEEL QUARTER TURN LOCKING KARABINER
PN 113(5 Nos.)



ALUMINIUM SMALL SINGLE PULLEY SINGLE SIDE ATTACHMENT
AP011A



DESCENDER JUMPER
PN410



ALUMINIUM SCAFFOLD HOOK
PN136



SAFETY GLOVES
HS 61



CROSS ARM STRAP
PN 803 (1.2mtr)(2 Nos.)



WORK POSITIONING LANYARD WITH GRIP ADJUSTER
PN 247 (2.0m)



KERNMANTLE ROPE ANCHORAGE LINE
PN 950 (KRKD11)(50m)



TWISTED ROPE EA FORKED LANYARD
PN 351N (1.5m)



DELUXE UNIVERSAL KIT BAG
BG 63



ROPE CLAMP
PN 402(R)



RESCUE POLE
PN 821N



FALL ARREST RESCUE WITH RATCHET HAULING SYSTEM KIT

Ref. PN 666

This Kit is designed for the personnel engaged in working on a high rise tower with an extra facility of some specialized products to suit the requirement of the working individual.





TOWER HARNESS
PN 56



GRIP DESCENDER
PN 401(113)



SAFETY GLOVES
HS 61



RATCHET HAULING SYSTEM
PN 411



CROSS ARM STRAP
PN 807(1.5m)



KERNMANTLE ROPE ANCHORAGE LINE
PN 950 (KRKD11)(121)
(50m)(2 Nos.)



WORK POSITIONING LANYARD WITH GRIP ADJUSTER
PN 247 (2.0m)



STEEL QUARTER TURN LOCKING KARABINER
PN 111 (2 Nos.)



KERNMANTLE ROPE EA FORKED LANYARD
PN 341(A)(1.5m)



DELUXE UNIVERSAL KIT BAG
BG 63

RESCUE LADDER SYSTEM FOR SELF-RESCUE

Ref. IMP 008

KARAM introduces the Rescue Ladder System, designed to rescue the victim from fall. The Ladder of 6.0m included in the Kit allows a victim to climb safely while the rescuer pulls rope slack through the Rope Grab included in the system. This eliminates the chance of a high impact secondary fall.



SELF RESCUE LADDER
IMP 008(1)



RIGGING PLATE
PRP 01



CROSS ARM STRAP
PN 807(1.5m)



STEEL QUARTER TURN LOCKING KARABINER
PN 113(2 Nos.)



SAFETY GLOVES
HS 61



KERNMANTLE ROPE ANCHORAGE LINE
PN 910 (KRKD11)(10m)



ROPE GRAB BLOCKER
RG 07(113)



DELUXE UNIVERSAL KIT BAG
BG 63



PAINTER KIT (ESSENTIAL)

Ref. PN 667

Painter Kit (Essential) is designed to minimize the risk, and provide protection against, the danger of falling from heights while painting on exteriors and facades. The kit is specifically designed for painters to meet their specific requirements, ensuring their complete safety along with high comfort levels.





TOWER HARNESS
PN 56(P)





GRIP DESCENDER
PN 401(113)

SAFETY GLOVES
HS 61



STEEL QUARTER TURN LOCKING KARABINER
PN 111 (2 Nos.)



OPENABLE PROTECTIVE SLEEVE
PR 02 (4 Nos.)



TWIN TOOLS LANYARD
TL02(N)



GALVANIZED STEEL ROPE GRAB
RG 11 (25)(PN112)(C)



KERNMANTLE ROPE ANCHORAGE LINE
PN 950 (KRKD11)(121)(50m)(2 Nos.)



CROSS ARM STRAP
PN 803 (1.2mtr)(2 Nos.)



EASY SEAT
IMP 004



PAINTERS MASK
RFH 22+ OV

NEW



DELUXE UNIVERSAL KIT BAG
BG 64

PAINTER KIT (PREMIUM)

Ref. PN 667(P)

For adding more comfort and ergonomics, KARAM Painter Kit (Premium) comes with additional products like Parapet Anchor (Ref. SA11), Edge Protector (Ref. ARC 02), and Easy Seat (IMP 004), enabling the painters to work tirelessly throughout the day.



TOWER HARNESS
PN 56(P)





GRIP DESCENDER
PN 401(113)

PAINTERS MASK
RFH 22+ OV



STEEL QUARTER TURN LOCKING KARABINER
PN 111 (2 Nos.)



OPENABLE PROTECTIVE SLEEVE
PR 02 (4 Nos.)



TWIN TOOLS LANYARD
TL02(N)



GALVANIZED STEEL ROPE GRAB
RG 11 (25)(PN112)(C)



EDGE PROTECTOR
ARC 02



SAFETY GLOVES
HS 61



KERNMANTLE ROPE ANCHORAGE LINE
PN 950 (KRKD11)(121)(50m)(2 Nos.)



PARAPET ANCHOR
SA 11 (2 Nos.)



EASY SEAT
IMP 004

NEW



DELUXE UNIVERSAL KIT BAG
BG 64



QUICK ZIP LINE SYSTEM KIT

Ref. PN 670

This Kit is specially designed keeping in mind the needs of Climbers, Mountaineers and Adventure Geeks involved in creating the Zip Lining System. Equipped with all the essential products, this kit is the ideal kit for zip line riders.

Scan here *for a virtual tour of the product*







MAGNA 3
(2 Nos.)



DESCENDER JUMPER
PN 410 (2 Nos.)



ROPE CLAMP
PN 402 (1 No.)



EVACUATION TRIANGLE
PN 852 (1 No.)



CONCRETE ANCHOR STRAP
PN 806 (4 Nos.)



KERNMANTLE ROPE(Dia 12mm)
PN 9120(KRKD12)
(120 mtrs- 1 Nos. 60 mtrs - 2 Nos.)



STEEL TRIPLE ACTION LOCKING KARABINER
PN 114 (15 Nos.)



FIGURE OF 8
PN 431 (1 No.)



RESPAC RECOVERY STRETCHER
PN 403(1 No.)



WEBBING COWS TAIL
PN 401W(25) (1 No.)



ALUMINIUM SINGLE PULLEY
AP 011 (1 No.)



DOUBLE TANDEM PULLEY
AP 016 (2 Nos.)



DELUXE UNIVERSAL KIT BAG
BG 63



SAFETY GLOVES
HS 61

MATERIAL HAULING SYSTEM

Ref. PN 660



Ref. PN 660(3:1)
Mechanical Advantage: 1/3

Ref. PN 660(5:1)
Mechanical Advantage: 1/5

**Actual color of the rope used in the above system may vary with the picture shown above.*



Aluminium Snap Hook
D Type



Karabiner
Ref. PN 111(C)
EN 362:2004 Class B



Karabiner
Ref. PN 113
EN 362:2004 Class B



Ref. AP 012
EN 12278:2007



Ref. AP 014
EN 12278:2007



Ref. AP 013
(For 5:1)
EN 12278:2007



Rope Retension Guide
Ref. PN 404
Atex 2014/34/EU



Descender
Ref. PN 410
EN 341 Type 2 Class B
EN 12841 Type C



Rope Clamp
Ref. PN 402(R)SL
EN 567:2013



Cross Arm Strap
Ref. PN 803 (1.2m)
EN 795:2012 Type B



Kernmantle Rope Anchorage Line(10.5mm)
EN 1891:1998
as per directive

IDEAL FOR USE

To raise and lower the mass/load/material with ease. The device is also used for either raising or lowering the mass/load/material to the ground or the next accessible level.

GENERAL FEATURES

- It is a versatile system made up of Aluminium and Steel components, which are light in weight and highly corrosion resistant.
- The system is provided in a fully assembled factory fitted 3:1 or 5:1 hauling ratio.
- A single person can easily operate the device to raise or lower mass/load/material with considerable ease.
- Unidirectional movement of the Rope Retention Guide (Ref. PN 404) allows the rope to hold itself in place, preventing any reel-back and allowing effortless ascent and controlled descent.
- It comes with an ascend Rope Clamp along with a Cross Arm Strap and specially designed control device PN 410. This arrangement stops the descent in case it is accidentally released.
- The rope used is a KARAM Kernmantle rope of Diameter 10.5mm. This rope is tested for strength, is abrasion resistant, and comes fitted in the system in lengths as per requirement.
- Suitable for use for a maximum personal load of 250 kgs.

KARAM provides a vast range of Cable Load Arresters with different load capacities, which are used to stop the fall of a load (basketball hoop, ramp lighting for scenic, industrial machine etc.)

Load arrester stop the fall of load for a short distance in case of the following situations:

- Break of chain or cable for hoisting the load.
- Failure of the retaining elements of the load.

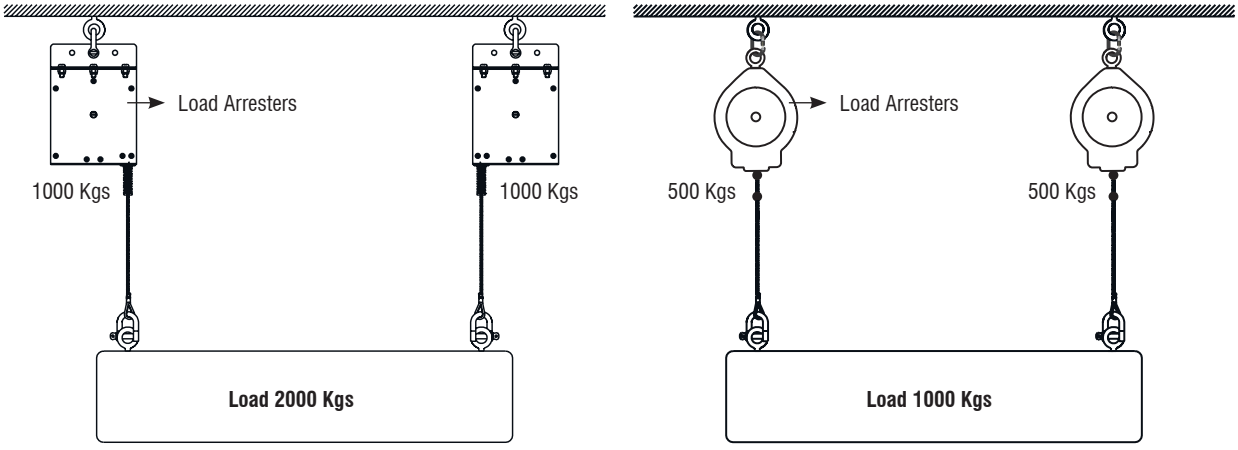
Cable Load Arresters are not PPE. Conforms to Machine Directive 2006/42/EC.

UNDERSTANDING LOAD ARRESTERS:

These are backup safety system which arrest the fall of a load in the event of the primary systems failing.

It reduces the risk of equipment damage and protects personnel in and around the danger zone.

KARAM range of Load Arresters is available to protect loads ranging from 200kgs to 1000kgs with a variety of wire rope lengths based on the six model sizes. These can also be used in conjunction with other arresters of the same size to achieve a desired working load capacity.



Why Load Arresters?

Load Arrestors are needed to

- Arrest falling loads/ weights
- Does not damage the anchorage and load due to force
- Possibility of Different Lengths

Advantages of Load Arresters:

Following properties of load arrestors which make these useful:

- Quick fall Arrest Ability
- Shock Absorbing
- Self-Retraction

Area of Application

- Automobile industry
- Pharmaceutical sector
- Construction industry
- Logistics and warehousing
- Steel industry
- Cement sector



LA0200-02	3.66kg
LA0200-03	3.74kg
LA0200-10	4.20kg



LA0300-02	5.33kg
LA0300-03	5.44kg
LA0300-05	5.68kg
LA0300-10	6.50kg
LA0300-15	7.32kg

II 2 G
ATEX 2014/34/EU



LA0400-10	11.0kg
LA0400-15	11.5kg
LA0400-20	12.0kg

II 2 G
ATEX 2014/34/EU



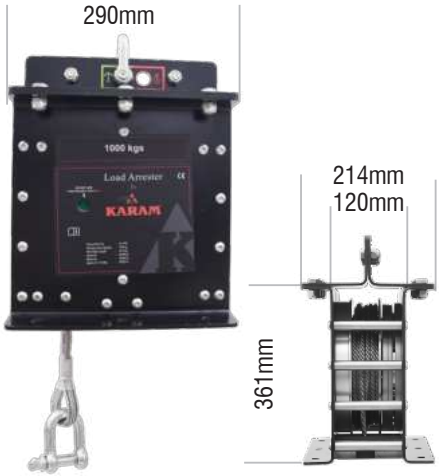
LA0500-10	11.5kg
LA0500-15	12.0kg

II 2 G
ATEX 2014/34/EU



LA1000-10	31.12kg
LA1000-11	31.37kg

II 2 G
ATEX 2014/34/EU



LA1000-16	35.0kg

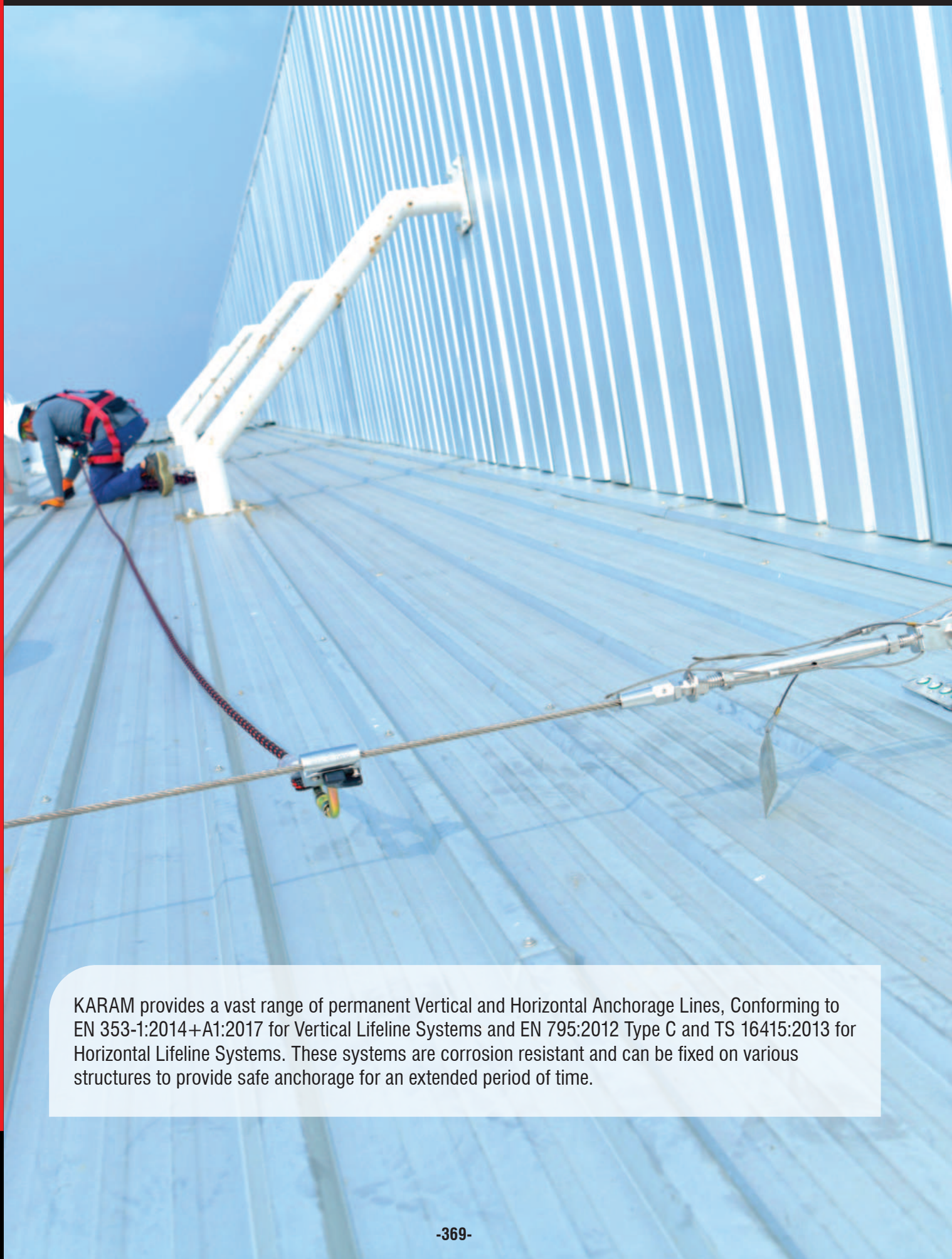
II 2 G
ATEX 2014/34/EU

Technical Snapshot

Ref.	Length of Cable	Max Load Capacity	Casing Material	Wire Rope Material and Dia	Minimum Breaking Strength of Load Arrester Assembly
LA0200-02, 03, 10	2m, 3m 10m	200 kg	High impact strength polymer	Galvanized Steel wire rope of dia 4.8mm	> 3kN
LA0300-02, 03, 05, 10, 15	2m, 3m, 5m 10m, 15m	300 kg			> 4kN
LA0400-10, 15, 20	10m, 15m, 20m	400 kg		Galvanized Steel wire rope of dia 5.8mm	> 6kN
LA0500-10, 15	10m, 15m	500 kg		Galvanized Steel wire rope of dia 6.0mm	> 7kN
LA1000-10, 11	10m, 11m	1000 kg	High strength alloy steel	Stainless Steel wire rope of dia 8.0mm	> 13kN
LA1000-16	16m				

**Also available with Stainless Steel Wire Rope*

FIXED LINE SYSTEMS



KARAM provides a vast range of permanent Vertical and Horizontal Anchorage Lines, Conforming to EN 353-1:2014+A1:2017 for Vertical Lifeline Systems and EN 795:2012 Type C and TS 16415:2013 for Horizontal Lifeline Systems. These systems are corrosion resistant and can be fixed on various structures to provide safe anchorage for an extended period of time.

Standards at a Glance

KARAM Fixed Line Systems and supporting posts are certified under EN 795:2012, CEN/TS 16415:2013, EN 353-1:2014+A1:20174, IS 3521(Part-8):2021 and IS 3521(Part-4):2021 for protection against fall while ascending, moving or working at height.

SINGLE USER ANCHOR DEVICES

Applicable Standard: EN795:2012

The EN795:2012 standard provides guidelines for Single User anchor devices in fall protection systems. It ensures the devices can handle both static (12kN for 3 minutes) and dynamic (9kN shock load) forces during a fall. Lifelines must also be able to support rescue operations after a fall, with force predictions and test results within 20% accuracy.

HORIZONTAL LINES

CEN/TS 16415:2013

Multi-user anchor devices:

Applicable standard: CEN/TS 16415:2013

The CEN/TS 16415:2013 standard, added to EN795:2012, requires stronger anchor devices for multiple users. Load tests increase by 1kN per additional user, and dynamic tests use a 200kg mass for two users. The system must stay within 20% force and displacement tolerances.



VERTICAL LIFE LINE SYSTEMS

EN 353-1:2014+A1:2017

Vertical Life Line Systems on wire rope and aluminium rail systems.

The EN 353-1:2014+A1:2017 standard provides guidelines for Vertical Life Line Systems with wire rope or aluminum rail. It ensures that rigid anchor lines can sustain the maximum dynamic load generated by one person, including equipment, during a fall from height. This standard applies to vertically installed rigid anchor lines.

IS 3521(Part-4):2021

For Vertical rails and vertical lifelines incorporating a sliding-type fall arrester

All Vertical rails and vertical lifelines incorporating a sliding-type fall arrester certified according to IS 3521 (Part-4):2021 must meet these requirements:

- Requirement for vertical rails
- Requirements for temporary vertical lifelines
- Vertical-lifeline materials and construction
- Vertical-lifeline energy absorbers
- Sliding-type fall arrester requirements
- Requirements for connecting lines
- Requirements for connectors
- Corrosion resistance
- Locking performance after conditioning
- Locking reliability
- Dynamic performance
- Tensile strength of vertical rails
- Tensile strength of vertical lifelines

EN 516:2006

For Walkways and Step Walkways:

EN 516:2006 sets safety rules for roof walkways, treads, and steps on sloped roof. It ensures they are strong, non-slip, and durable, with guidelines for testing and installation

In compliance with EN 516:2006, the walkways are subjected to a static test with a test load of 1.5 kN, where the allowed deformation is 1/100 of the span. The test load is then increased to 2.6 kN for an additional minute. At the maximum load of 2.6 kN, the product must not break, and the fastening system should not deform more than 5 mm.

EMBRACING THE NEW AGE TECHNOLOGY

KARAM'S FIXED LINE SYSTEMS come with RFID Tag which is also an important tool used to combat the problem of the sale of fake KARAM products. It identifies the Fixed Line as a genuine KARAM product and tracks the authenticity to its roots. This tag when scanned from an Android or iOS phone, takes you directly to the KARAM application. KARAM application by KARAM is India's first mobile application for safety equipment asset management. It reminds the user of pending inspection and provides access to information related to the Fixed Line System- its batch number, technical documents, correct areas of use, and much more. In short, KARAM application provides a one-stop safety solution in creating awareness for the use of Fall Protection items.

Testing

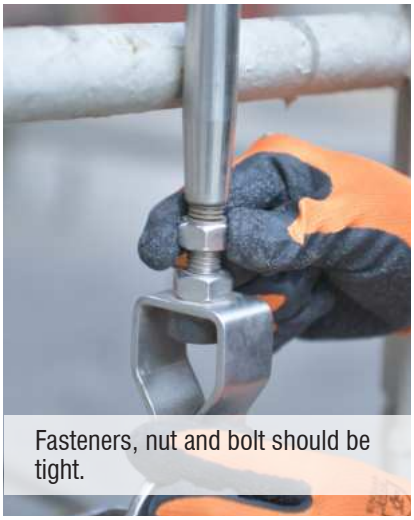


DYNAMIC TEST

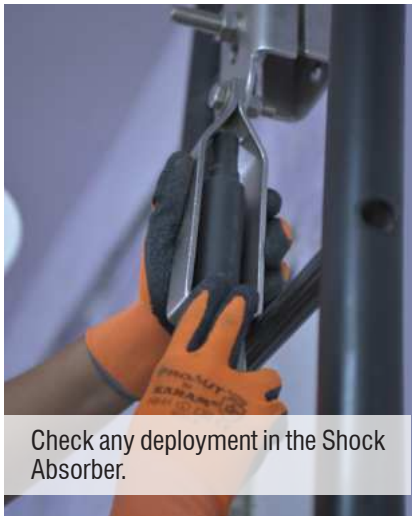
TESTED & CERTIFIED

II 2 G

Points to remember before using a Vertical / Horizontal Anchorage Lifeline



Fasteners, nut and bolt should be tight.



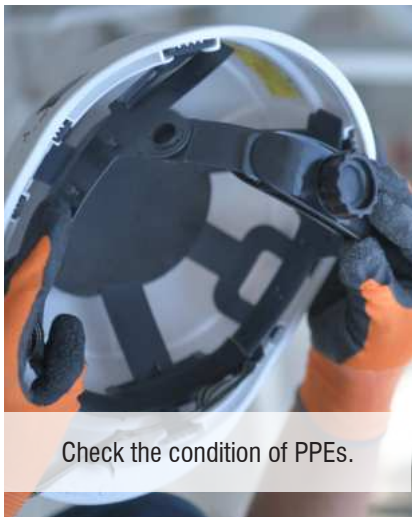
Check any deployment in the Shock Absorber.



Enough tension is achieved in the wire rope.



Check for the deformation in any component of the system.



Check the condition of PPEs.



Inspect the Carriage Body.

- Harness not to be hanged on Retractable Fall Arrester Blocks after usage of the lifeline.
- Retractable Fall Arrester Block lanyard not to be released faster.
- Retractable Fall Arrester Blocks lanyard not to be pulled out and tied on some anchor.
- In an event of a fall in the system, report to KARAM representative or KARAM Authorized Service Centre.

VERTICAL ANCHORAGE LINE SYSTEM ON RIGID CABLE LINE





Extension Arm
Ref. PN 7000(06)

Ref. Vertex PN 6000

PN 6000 is an integrated solution to arrest the fall of a user who has to constantly climb up and down a ladder.

IDEAL FOR USE

Telecom towers, radio and TV mast, power supply and hydroelectric installations, industrial chimney, wind power facility, construction sites etc.

GENERAL FEATURES

- MOC: Stainless Steel 316.
- Installation is simple and easy, requiring minimum effort.
- The Rope Grab comes with special anti-inversion mechanism which enables it to always be fitted in the correct position.
- Intermediates to reduce vibration and proper alignment of wire rope at every 10m.
- Certified to EN 353-1:2014+A1:2017

Ex II 2 G CE

EN 353-1:2014+A1:2017

Product	Product Name	Ref.	Features
	Intermediate	PN 2001(04)	• Material: Stainless Steel Grade 316 • Recommended Installation-Every 10.0m
	Set of 2-U Bolts, 1 wire rope cap and 1 Thimble	PN 6000(01)	• U-Bolts: Qty- 2 nos. • Material: Stainless Steel 316 • Thimble: Qty- 1 no. • Wire Rope Cap: Qty- 1 no. • Material: Stainless Steel 316
	Wire crimping assembly	PN 7000(14)	• Thimble: Qty-1 no. • Ferrule: Qty-2 nos. • Aluminum wire rope cap: Qty-1 no.
	Mounting Bracket	PN 7000(01)V PN 7000(01)S as optional	• Material: Stainless Steel 316 • Complies with EN 795 Type A
	Tensioner	PN 7000(05)	• Regulates tensioning of the cable • Equipped with a Tension Indicator • Material: Stainless Steel Grade 316 • Quantity: 1 nos.
	Rope Grab	RG 02S (PN 600(S)) 112	• Material of Rope Grab: Stainless Steel 316 • Comes with Integral textile energy absorber • Anti inversion mechanism • Material of Karabiner: Alloy Steel
	Wire Rope (Cable Wire)	PN 9XXXS	• Material: Stainless Steel 316 • Diameter: 8mm • Construction: 7x19
	D-shakle	PN 4000MU(02.5)(D)	• Material Stainless Steel 316
	RFID Tag	RFID 019	• For identification traceability and maintenance of implementation records.
	Optional: Mounting Brackets	PN 7000(13): Material: Stainless Steel PN 7000(13)(EC): Material: Alloy Steel with black ED coating	
	Optional: Tensioner	PN 7000(28)	• Regulates tensioning of the cable • Equipped with a Tension Indicator • Material: Stainless Steel Grade 316 • Quantity: 1 nos.

***Scan here** for a virtual tour of the product*



Ref. Vertex PN 7000

PN 7000 is an integrated solution to arrest the fall of a user who has to constantly climb up and down a ladder.

IDEAL FOR USE

Telecom towers, radio and TV mast, power supply and hydroelectric installations, industrial chimney, wind power facility, construction sites etc.

GENERAL FEATURES

- MOC: Stainless Steel 316.
- Permanently installed Stainless Steel Shock Absorber at the top of the line which offers distinct advantage over the textile absorber in term of UV degradation and resistance to harsh climate conditions.
- Shock Absorber is constructed of a unique design that helps in easy installation of the system.
- Intermediates to reduce vibration and proper alignment of wire rope at every 10m.
- Certified to EN 353-1:2014+A1:2017, Atex 2014/34/EU, IS 3521(Part 4):2021

Extension Arm
Ref. PN 7000(06)

II 2 G

IS 3521(Part 4):2021 EN 353-1:2014+A1:2017

Product	Product Name	Ref.	Features
	Intermediate	PN 2001(04)	• Material: Stainless Steel Grade 316 • Recommended Installation-Every 10.0m
	Set of 2-U Bolts, 1 wire rope cap and 1 Thimble	PN 6000(01)	• U-Bolts: Qty- 2 nos. • Material: Stainless Steel 316 • Thimble: Qty- 1 no. • Wire Rope Cap: Qty- 1 no. • Material: Stainless Steel 316
	Mounting Bracket	PN 7000(01)V PN 7000(01)S as optional	• Material: Stainless Steel 316 • Complies with EN 795 Type A
	Shock Absorber	PN 7000(02)	• Material: Stainless Steel 316 • Limits the impact of force in the event of fall to less than 6kN
	Tensioner	PN 7000(05)	• Regulates tensioning of the cable. Equipped with a Tension Indicator • Material: Stainless Steel Grade 316 • Quantity: 1 nos.
	Wire crimping assembly	PN 7000(14)	• Thimble: Qty-1 no. • Ferrule: Qty-2 nos. • Wire Rope Cap: Qty-1 no.
	Rope Grab	RG 02 (112)	• Material of Rope Grab: Stainless Steel 316 • Anti inversion mechanism • Material of Karabiner: Alloy Steel
	Wire Rope (Cable Wire)	PN 9XXXS	• Material: Stainless Steel 316 • Diameter: 8mm • Construction: 7x19
	RFID Tag	RFID 019	• For identification traceability and maintenance of implementation records.
	Optional: Mounting Brackets	PN 7000(13): Material: Stainless Steel PN 7000(13)(EC): Material: Alloy Steel with ED coated (black)	
	Optional Tensioner	PN 7000(28)	• Regulates tensioning of the cable • Equipped with a Tension Indicator • Material: Stainless Steel Grade 316 • Quantity: 1 nos.

Scan here *for a virtual tour of the product*



Ref. Vertex PN 7500

NEW

PN 7500 is an integrated solution to arrest the fall of a user who has to constantly climb up and down a ladder.

IDEAL FOR USE

Telecom towers, radio and TV mast, power supply and hydroelectric installations, industrial chimney, wind power facility, construction sites etc.

GENERAL FEATURES

- MOC: Stainless Steel 316.
- The rope grab has a unique design, which pass through the intermediates smoothly and has an inbuilt shock absorber.
- Intermediates to reduce vibration and proper alignment of wire rope at every 10m.
- Certified to EN 353-1:2014+A1:2017, Atex 2014/34/EU.

Ex II 2 G CE

EN 353-1:2014+A1:2017

Product	Product Name	Ref.	Features
	Intermediate	PN 7500(02)	• Material: Stainless Steel Grade 316 • Recommended Installation-Every 10.0m
	Set of 2-U Bolts, 1 wire rope cap and 1 Thimble	PN 7500(05) PN 7000(12)	• U-Bolts: Qty- 2 nos. • Material: Stainless Steel 316 • Thimble: Qty- 1 no. • Wire Rope Cap: Qty- 1 no. • Material: Aluminium Alloy
	Mounting Bracket	PN 7000(01)V PN 7000(01)S as optional	• Material: Stainless Steel 316 • Minimum Breaking Strength: 23 kN • Complies with EN 795 Type A
	Swaged Cable Extremity	PN 4000(15)	• Material: Stainless Steel 316 • Allows crimping of the cable wire at the desired length, and eliminates danger of any loose wire
	Tensioner	PN 7000(28)	• Regulates tensioning of the cable Equipped with a Tension Indicator • Material: Stainless Steel Grade 316 • Quantity: 1 nos.
	Pass Through Carriage	PN 7500(01)(112)	• Material: Stainless Steel 316 • Finish: Electro polished • Material of Karabiner: Alloy Steel
	Wire Rope (Cable Wire)	PN 9XXXS	• Material: Stainless Steel 316 • Diameter: 8mm • Construction: 1x19
	RFID Tag	-	• For identification traceability and maintenance of implementation records.
	Optional: Tensioner	PN 7000(05)	• Regulates tensioning of the cable • Equipped with a Tension Indicator • Material: Stainless Steel Grade 316 • Quantity: 1 nos.

***Scan here** for a virtual tour of the product*

**Images incorporated here are for illustration purpose, actual product may vary as per size, demand and needs*

VERTICAL ANCHORAGE LINE SYSTEM ON RIGID ALUMINIUM RAIL



Ref. Vertex PN 8000

PN 8000 is an integrated Fall Arrest solution made of a Vertical Aluminium Alloy Guide Rail over which glides a Guided-Type Fall Arrest Trolley.

IDEAL FOR USE

Telecom towers, radio and TV mast, power supply and hydroelectric installations, industrial chimney, wind power facility, construction sites etc.

GENERAL FEATURES

- MOC: Aluminium Alloy
- Corrosion free anodized Aluminium Rail.
- The line consists of the Trolley which has an inbuilt shock absorption feature.
- Trolley can negotiate the bends easily.
- Locking jibs at either end for unintentional release of trolley from the rail.
- The Rail comes with an Extension Arm that curves at the Ladder end over the working platform for safe access.
- Certified to EN 353-1:2014+A1:2017, Atex 2014/34/EU, IS 3521(Part 4):2021

II 2 G

IS 3521(Part 4):2021 EN 353-1:2014+A1:2017

Product	Product Name	Ref.	Features
	Karabiner	PN 111(C)	• Quarter Turn Auto-locking Steel Karabiner • Material: Alloy Steel
	Aluminium Rail Intermediate	PN 5000(01)	• Material: Extruded Aluminium Alloy • Length: 3.0m
	Aluminium Rail Extremity	PN 5000(02)	• Material: Extruded Aluminium Alloy. Locking Jib to prevent unintentional release of trolley from the rail • Length: 3.0m
	Junction	PN 5000(08)	• Used to connect two rails together • Junction Material: Aluminium • Fasteners Material: Stainless Steel
	Vertical Trolley	PN 8000(01)	• Material: Stainless Steel 316 Trolley with Brass wheel which provides frictionless movement • Comes with Anti-inversion mechanism
	Alu Extension	PN 8000(02)	• Material: Extruded Aluminium Alloy • Length: 1.5m
	Rung Clamp	PN 8000(03)	• Material: Stainless Steel 316 • Helps to Clamp the system onto the underlying ladder
	RFID Tag	-	• For identification, traceability and maintenance of implementation records.

Scan here *for a virtual tour of the product*

**Images incorporated here are for illustration purpose, actual product may vary as per size, demand and needs*



Option of Half Rungs Ladder PN 9000(0.1.1)L
PN 9000(0.1.1)R also available.
Ladder Rung Material: Aluminium Alloy CED coated (black)

***Scan here** for a virtual tour of the product*

Ref. Vertex PN 9000

This is a complete Fall Protection Ladder System which consists of CED coated (black) Steel Ladder Rungs over which the Vertical Anchorage Rail made of anodized Aluminium is fixed.

IDEAL FOR USE

In areas where no pre-fabricated ladders or climbing structures are available for climbing.

GENERAL FEATURES

- Continuous ladder with fall protection.
- Can be fitted over various structures using different types of brackets and fasteners.
- Corrosion free anodized Aluminium Rail.
- Ladder rungs are CED coated (black).
- The line consists of the trolley which has an inbuilt shock absorption feature.
- Locking jibs at either end for unintentional release of trolley from the rail.
- Trolley can negotiate the bends easily.
- The Rail comes with an Extension Arm that curves at the Ladder end over the working platform for safe access.
- Certified to EN 353-1:2014+A1:2017, Atex 2014/34/EU

Ex II 2 G CE

EN 353-1:2014+A1:2017

Product	Product Name	Ref.	Features
	Karabiner	PN 111(C)	• Quarter Turn Auto-locking Steel Karabiner • Material: Alloy Steel
	Stainless Steel Mounting Nut	PN 5000(03)	• To connect the rail to the mounting Bracket • Material: Stainless Steel 316
	Stainless Steel Ceiling Mounting Bracket	PN 5000(06)	• Helps to mount the ladder on to the underlying structure • Material: Stainless Steel 316
	Extendable Bracket	PN 9000(13) PN 9000(13)(EC)	• Helps to mount the ladder on to the underlying structure • PN 9000(13): Stainless Steel 316 • PN 9000(13)(EC): Alloy Steel
	Junction	PN 5000(08)	• Used to connect two rails together • Clamp made up of Aluminium Alloy and Fasteners- Stainless Steel 316
	Vertical Trolley	PN 8000(01)	• Material: Stainless Steel 316 Trolley with Brass wheels which provide frictionless movement.Anti inversion pin to prevent unintentional release of trolley from the rail
	Alu Extension	PN 8000(02)	• Material: Extruded Aluminium Alloy • Length: 1.5m
	Ladder Rung Assembly	PN 9000(01)	• Ladder Rung Material: Aluminium Alloy ED coated
	Aluminium Rail Extremity	PN 9000(02)	• Material: Extruded Aluminium Alloy. • Length: 3 m
	Aluminium Rail Intermediate	PN 9000(03)	• Material: Extruded Aluminium Alloy • Length: 3.0m
	RFID Tag	-	• For identification, traceability and maintenance of implementation records.

HORIZONTAL ANCHORAGE LIFELINE SYSTEM ON CABLE LINE

Ref. Horizon PN 4000 (Roof Mounted)

Horizon PN 4000 (Roof Mounted) provides permanent anchorage to max. 4 users who have to constantly move along an elevated horizontal track on the roof.

IS 3521(Part 8):2021 EN 795:2012 Type C TS16415:2013

II 2 G

NEW



IDEAL FOR USE

On pre-engineered building roofs, fragile roofs, industrial buildings, airports etc.

Scan here *for a virtual tour of the product*

GENERAL FEATURES

- MOC: Stainless Steel.
- The line has a Shock Absorber at one end which reduces the impact of fall both on the user as well as on the extremities.
- The Shock Absorber features a fall indicator.
- Intermediates are required at every 5.0m to 15.0m for longer lines
- Carriage body passes through intermediates without disconnection.
- Variety of roof posts available for different types of roof sheet profiles.
- Certified to EN 795:2012 Type C and TS16415:2013 (for upto 4 users), IS 3521(Part 8):2021 and ATEX 2014/34/EU

Product	Product Name	Ref.	Features
	Swaged Tensioner	PN 4000(03)N	• Regulates tensioning of the cable • Material: Stainless Steel 316 • Feature: Swage termination & Tension Indicator
	Swageless Tensioner	PN 4000(03)N (SL)	• Regulates tensioning of the cable • Material: Stainless Steel 316 • Feature: Swageless termination & Tension Indicator
	Carriage Body	PN 4000(40)	• Material: Stainless Steel 316 • Feature: Friction Free movement
	Intermediate	PN 4000(10)	• Material: Stainless Steel 316 • Recommended Installation-every 15.0m
	Swaged Cable Extremity	PN 4000(15)	• Allows crimping of the cable wire at the desired length, and eliminates danger of any loose wire • Material: Stainless Steel 316 • Feature: Swaged termination
	Cable Extremity (swageless)	PN 7000(03)	• Optional
	Shock Absorber	PN 4000MU(02)	Material: Stainless Steel 316
	Wire Rope (Cable Wire)	PN 9XXXS	• Material: Stainless Steel 316 • Diameter: 8mm • Construction: 7x19
	RFID Tag	RFID 018	For identification, traceability and maintenance of implementation records.
	Optional: Intermediate	PN 4000(10)N	• Material: Stainless Steel 316 • Recommended Installation-every 15.0m

**Images incorporated here are for illustration purpose, actual product may vary as per size, demand and needs*

Ref. Horizon PN 4000 (Floor/Ceiling Mounted)

Horizon PN 4000 (Floor/Ceiling Mounted) provides permanent anchorage to max. 4 users simultaneously, who have to constantly move along an elevated horizontal track.

IS 3521(Part 8):2021 EN 795:2012 Type C TS 16415:2013 II 2 G

NEW



Scan here for a virtual tour of the product

IDEAL FOR USE

In truck loading/unloading, advertisement bill boards, industrial cranes, oversized machines, reactors, turbines, rail gantries etc.

GENERAL FEATURES

- MOC: Stainless Steel 316.
- The line has a Shock Absorber at one end which reduces the impact of fall both on the user as well as on the extremities.
- The Shock Absorber features a fall indicator.
- Intermediates are required at every 5.0m to 15.0m for longer lines.
- Carriage body passes through intermediates without disconnection.
- The system is certified to be intrinsically safe; hence, it is an ideal choice for use in Industries like Petroleum/ Petro-Chemical Plants without fear of causing explosion due to any sparking.
- Certified to EN 795:2012 Type C and TS 16415:2013 (for up to 4 users), IS 3521(Part 8):2021 and ATEX 2014/34/EU.

Product	Product Name	Ref.	Features
	Swaged Tensioner	PN 4000(03)N	• Regulates tensioning of the cable • Material: Stainless Steel 316 • Feature: Swage Termination & Tension Indicator
	Swageless tensioner	PN 4000(03)N (SL)	• Regulates tensioning of the cable • Material: Stainless Steel 316 • Feature: Swageless Termination & Tension Indicator
	Universal Extremity Plate	PN 4000(09)	Material: Stainless Steel 316
	Intermediate	PN 4000(10)	• Material: Stainless Steel 316 • Recommended Installation-every 15.0m
	Swaged Cable Extremity	PN 4000(15)	• Allows crimping of the cable wire at the desired length, and eliminates danger of any loose wire • Material: Stainless Steel 316 • Feature: Swaged termination
	Cable Extremity(swageless)	PN 7000(03)	Optional
	Shock Absorber	PN 4000MU(02)	Material: Stainless Steel 316
	Wheel Type Carriage Body	PN 4000(17)	• Material: Stainless Steel 316 • Feature: Friction Free movement
	Double Tandem Pulley Small with SS Sheves	AP 016	Optional
	RFID Tag	RFID 018	For identification, traceability and maintenance of implementation records.
	Wire Rope (Cable Wire)	PN 9XXXS	• Material: Stainless Steel 316 • Diameter: 8mm • Construction: 7x19

**Images incorporated here are for illustration purpose, actual product may vary as per size, demand and needs*

Ref. Horizon PN 4000 LS (Floor/Ceiling Mounted)

Horizon PN 4000 LS (Floor/Ceiling Mounted) provides permanent anchorage to max. 4 users simultaneously, who have to constantly move along an elevated horizontal track.

Ex II 2 G CE

EN 795:2012 Type C
TS 16415:2013

NEW



Scan here *for a virtual tour of the product*

IDEAL FOR USE

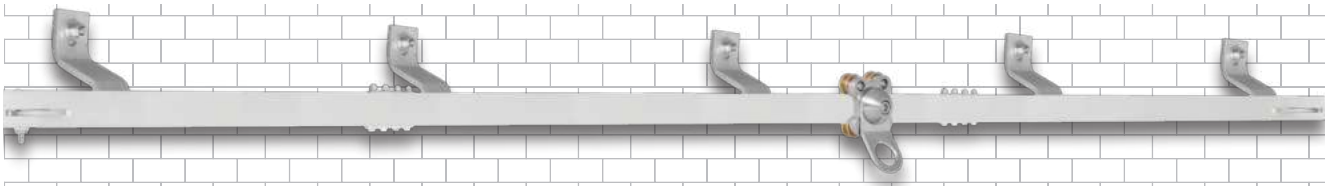
In truck loading/unloading, advertisement bill boards, industrial cranes, oversized machines, reactors, turbines, rail gantries etc.

GENERAL FEATURES

- MOC: Stainless Steel 316.
- This horizontal lifeline system is designed for single span of 5 meters to 35 meters, and it features a new shock absorber that can absorb forces of upto18 kN.
- Additionally, it consists of 1X19 wire rope construction.
- Carriage body passes through intermediates without disconnection.
- The system is certified to be intrinsically safe; hence, it is an ideal choice for use in Industries like Petroleum/Petro-Chemical Plants without fear of causing explosion due to any sparking.
- Certified to EN 795:2012 Type C and TS 16415:2013 (for up to 4 users) and ATEX 2014/34/EU.

Product	Product Name	Ref.	Features
	Swaged Tensioner	PN 4000(LS)(03)	• Regulates tensioning of the cable • Material: Stainless Steel 316 • Feature: Swage termination
	Wheel Type Carriage Body	PN 4000(17)	• Material: Stainless Steel 316 • Feature: Friction Free movement
	Universal Extremity Plate	PN 4000(09)	Material: Stainless Steel 316
	Intermediate (Optional)	PN 4000(10)	• Material: Stainless Steel 316 • Recommended Installation-every 35.0m
	Shock Absorber	PN 4000 LS(02)	Material: Stainless Steel 316
	Double Tandem Pulley Small with SS Sheves	AP 016	Optional
	RFID Tag	RFID 018	For identification, traceability and maintenance of implementation records.
	Wire Rope (Cable Wire)	PN 9X19	• Material: Stainless Steel 316 • Diameter: 8mm • Construction: 1x19

**Images incorporated here are for illustration purpose, actual product may vary as per size, demand and needs*



II 2 G

Scan here for a virtual tour of the product

Ref. Horizon PN 5000

This Anchorage Rail system is designed to provide safe anchorage for horizontal movement while working at height.

IDEAL FOR USE

On walls, floors, ceilings.

GENERAL FEATURES

- Corrosion free anodized aluminium rail.
- Continuous movement with complete fall protection.
- Four-wheel Trolley slides on the rail provides restrained fall protection.
- Locking jibs at either end for unintentional release of trolley from the rail.
- Curved Aluminium Rail for bends and curves.
- **Conforms to EN 795:2012 Type D, Atex 2014/34/EU and TS 16415:2013 (for up to 6 users)**

Product	Product Name	Ref.	Features
	Aluminium Rail Intermediate	PN 5000(01)	• Material: Extruded Aluminium Alloy • Length: 3.0m
	Aluminium Rail Extremity	PN 5000(02)	• Material: Extruded Aluminium Alloy • Length: 3.0m
	Mounting Nut	PN 5000(03)	• Material: Stainless Steel 316 to connect the rail to the mounting Bracket PN 5000(04), PN 5000(05) & PN 5000(06)
	Wall Mounting Bracket Flush Type	PN 5000(04)	• Material: Stainless Steel 316 (for Flush type wall Mounting)
	Wall Mounting Bracket with Recess	PN 5000(05)	• Material: Stainless Steel 316 (for Wall Mounting with Recess)
	Ceiling Mounting Bracket	PN 5000(06)	• Material: Stainless Steel 316 (For Ceiling mounting)
	Junction	PN 5000(08)	• Used to Connect Two rails together Material: Aluminium Alloy; Fastener- Stainless Steel 316
	Trolley for Wall	PN 5000(12)	• Material: Stainless Steel 316 Trolley with Brass wheels which provides frictionless movement
	Trolley for Ceiling/Floor	PN 5000(13)	
	Curved Aluminium Rail Material: Extruded Aluminium Alloy	PN 5000(09A)	• Outer wall mounted
		PN 5000(09B)	• Inner wall mounted
		PN 5000(10)	• Ceiling / Floors
	RFID Tag	-	• For identification, traceability and maintenance of implementation records.

**Images incorporated here are for illustration purpose, actual product may vary as per size, demand and needs*

NEW

MOUNTING BRACKET



Ref. PN 7000(21)L(90)



Ref. PN 7000(21)L(220)

GENERAL FEATURES

- Mounting Brackets are provided to install the anchorage line on a ladder.
- The unique design of the brackets allows easy and multiple ways of fitting the same either to the rungs of the ladder or to the side members.
- The same set of bracket can be used for anchorage at top and at the bottom.
- Easy and handy installation with only two studs.

Technical Snapshot				
Ref.	**Material**	**Finish**	**Compatible rung/pole diameters**	**Weight**
PN 7000(21)L(90)	Alloy Steel	Powder Coated Black	**Ø16.0mm to Ø90.0mm.**	1.634 kgs. ± 0.020 kgs.
PN 7000(21)L(220)			**Ø16.0mm to Ø220.0mm.**	2.718 kgs. ± 0.020 kgs.

NEW

ROUND CLAMP MOUNTING BRACKET FOR LIFELINE

Ref. PN 4000(39)



GENERAL FEATURES

- Clamping bracket is designed to mount the extremities and intermediates of HLL and VLL on round structured profile.
- Specially designed to be installed on round structure having Ø35.0mm to Ø50.0mm.

Technical Snapshot				
Ref.	**Material**	**Finish**	**Compatible rung/pole diameters**	**Weight**
PN 4000(39)	Stainless Steel	Electropolished / E Coated	Ø35.0mm to Ø50.0mm.	458.0 gms ± 10.0 gms.

NEW ➤ CORNER PIECE FOR FLOOR/CEILING

Ref. PN 4000(21)M 90⁰



Ref. PN 4000(21)M 120⁰



REF. PN 4000(21)M

- Corner piece designed to be fixed on ceiling /over the concrete roof in conjunction with horizontal lifeline (PN 4000).
- Comes with M12 fasteners for installation.
- Available in : 90° and 120° Curve Angle.

➤ CONSTANT FORCE ENERGY ABSORBER EXTREMITY WITH SWIVEL EYE FOR TRAPEZOIDAL ROOF

Ref. SA 38A(E)(SW)



GENERAL FEATURES

- Designed with an inbuilt shock absorption mechanism which activates in the event of a fall and rescues the forces on the users.
- Easy and quick to install.
- Comes with a swivel eye for 360⁰ rotation.
- The post deploys in the event of a fall to absorb the energy and hence protects the protects the roof sheet from damage.
- Comes with series of holes to adopt different trapezoidal roof. It is compatible with below mentioned pitch:- 217mm, 275mm, 285mm, 333mm, 347mm, 397mm, 405mm and 465mm.

➤ CONSTANT FORCE ENERGY ABSORBER EXTREMITY WITH SWIVEL EYE FOR STANDING SEAM ROOF

Ref. SA 51A(E)(SW)



GENERAL FEATURES

- Designed with an inbuilt shock absorption mechanism which activates in the event of a fall and reduces the forces on the user.
- Easy and Quick to install.
- Comes with a swivel eye for 360⁰ rotation
- The post deploys in the event of a fall to absorb the energy and hence protects the roof from damage.
- The base plate has series of holes to fit on standing seam roof with different seam distance between 250mm to 650mm.

Technical Snapshot

Ref.	Material	Installed on	Finish	Weight	Minimum Breaking Strength	Max. Users	Conforms to
SA 38A(E) (SW)	Stainless Steel Grade 316	Galvolume/Trapezoidal sheets of different pitch/rib.	Electro Polished	12.71kg	15kN	4	**EN 795:2012 Type A TS16415:2013 (for upto 4 users)**
SA 51A(E)) SW)		Standing seam roof.		10.0kgs		4	
PN 4000(21)M	SS Grade 316	Standing seam roof.		0.87kgs± 10.0gms		-	**EN795:2012 Type C TS16415:2013 Type C**

NEW ➤ ALUMINIUM CLAMPS FOR KLIP LOK ROOF SHEET



Ref. SA 116CL(E)SUB4

Klip lok clamps are designed to fix KARAM walkway platforms, corners, extremities or intermediates on Klip lok roof sheet.

Comes with specially designed screws to avoid damage to the roof.

Compatible with Klip lok roof sheet-770.



Ref. SA 116CL(E)SUB5

Klip lok clamps are designed to fix KARAM walkway platforms, corners, extremities or intermediates on Klip lok roof sheet.

Comes with specially designed screws to avoid damage to the roof.

Compatible with Klip lok roof sheet-406.



Ref. SA 116CL(E)SUB6

Klip lok clamps are designed to fix KARAM walkway platforms, corners, extremities or intermediates on Klip lok roof sheet.

Comes with specially designed screws to avoid damage to the roof.

Compatible with Klip lok roof sheet-700.

Technical Snapshot			
Ref.	**Material**	**Finish**	**Weight**
SA 116CL(E)SUB4	High strength Aluminium alloy.	Anodized	0.60 kgs. ± 0.05 kgs.
SA 116CL(E)SUB5			0.49 kgs. ± 0.05 kgs.
SA 116CL(E)SUB6			0.60 kgs. ± 0.05 kgs.



Ref. SA 51A(CL)(E)(01)

Klip lock clamps are designed to fix KARAM walkway platforms, corners, extremities or intermediates on klip lock roof sheets.

Comes with specially designed screws with polymer cap to avoid damage to the roof.

Compatible with Klip lok roof sheet-770



Ref. SA 51A(CL)(E)(02)

Klip lok clamps are designed to fix KARAM walkway platforms, corners, extremities or intermediates on Klip lok roof sheet.

Comes with specially designed screws with polymer cap to avoid damage to the roof.

Compatible with Klip lok roof sheet-406.



Ref. SA 51A(CL)(E)(03)

Klip lok clamps are designed to fix KARAM walkway platforms, corners, extremities or intermediates on Klip lok roof sheet.

Comes with specially designed screws with polymer cap to avoid damage to the roof.

Compatible with Klip lok roof sheet-700.

Technical Snapshot			
Ref.	**Material**	**Finish**	**Weight**
SA 51A(CL)(E)(01)	High strength Aluminium alloy.	Anodized	0.180 kgs. ± 0.010 kgs.
SA 51A(CL)(E)(02)			0.150 kgs. ± 0.010 kgs.
SA 51A(CL)(E)(03)			0.175 kgs. ± 0.010 kgs.

NEW

ANCHOR POSTS

Scan here for a virtual tour of the product



EXTREMITY ANCHOR POST FOR TRAPEZOIDAL ROOF

Ref. SA 87A(E)

GENERAL FEATURES

- Extremity Anchor Post designed to be fixed on the Trapezoidal Roof with help of rivets and self drilled screws supplied with anchor post.
- Anchor to be fixed on the roof sheets peak to prevent water clogging.
- Specially designed Swivel anchor eye at center of the plate to be used as anchorage point.
- Swivel anchor eye comes with inbuilt shock absorption to reduce the impact on roof.
- It is compatible with below mentioned pitch from 200.0mm, 250.0mm and 300.0mm on trapezoidal sheets.



INTERMEDIATE ANCHOR POST FOR TRAPEZOIDAL ROOF

Ref. SA 87A(I)

GENERAL FEATURES

- Intermediate Anchor post designed to be fixed on the Trapezoidal Roof with help of rivets and self drilled screws supplied with anchor posts.
- Anchor to be fixed on the roof sheets peak to prevent water clogging.
- Centre holes to be fixed on purling by using screw.
- It is compatible with pitch from 200.0 mm, 250.0 mm and 300.0 mm on trapezoidal sheets.



ANCHOR PLATE WITH CORNER BEND

Ref. SA 87A(C)(90)

GENERAL FEATURES

- Corner anchor posts designed to be fixed on the Trapezoidal Roof with help of rivets and self-drilled screws supplied with anchor.
- Anchor to be fixed on the peak of Trapezoidal Roof sheet and on purlins.
- Corner bend PN4000(21)M will come along with base plate Compatible with pitch from 200.0 mm, 250.0 mm and 300.0 mm on Trapezoidal sheets.

Technical Snapshot					
Ref.	**Material**	**Finish**	**Weight**	**Minimum Breaking Strength**	**Conforms to**
SA 87A(E)	Stainless Steel 316	Body: ED coated grey Swivel Anchor Eye: Electropolished	1.90 kg	15kN	**EN 795:2012 Type A AS/NZS 5532:2013**
SA 87A(I)		Body: ED coated Grey Intermediate: Electropolished	1.67kg		**EN 795:2012 Type C AS/NZS 5532:2013**
SA 87A(C)(90)		Polished with ED coated	2.00kg		**EN 795:2012 Type C AS/NZS 5532:2013**

NEW

ANCHOR POSTS



EXTREMITY ANCHOR POST FOR TRAPEZOIDAL ROOF

Ref. SA 87A(E)350

GENERAL FEATURES

- Extremity Anchor Post designed to be fixed on the Trapezoidal Roof with help of rivets and self drilled screws supplied with anchor post.
- Anchor to be fixed on the roof sheets peak to prevent water clogging.
- Specially designed Swivel anchor eye at center of the plate to be used as anchorage point.
- Swivel anchor eye comes with inbuilt shock absorption to reduce the impact on roof.
- It is compatible with below mentioned pitch from 240mm, 284 to 350mm on trapezoidal sheets.



INTERMEDIATE ANCHOR POST FOR TRAPEZOIDAL ROOF

Ref. SA 87A(I)350

GENERAL FEATURES

- Intermediate Anchor post designed to be fixed on the Trapezoidal Roof with help of rivets and self drilled screws supplied with anchor posts.
- Anchor to be fixed on the roof sheets peak to prevent water clogging.
- Centre holes to be fixed on purling by using screw.
- It is compatible with pitch from 240mm, 284 to 350mm on trapezoidal sheets.



ANCHOR PLATE WITH CORNER BEND

Ref. SA 87A(C)(90)350

GENERAL FEATURES

- Corner anchor posts designed to be fixed on the Trapezoidal Roof with help of rivets and self-drilled screws supplied with anchor.
- Anchor to be fixed on the peak of Trapezoidal Roof sheet and on purlins.
- Corner bend PN4000(21)M will come along with base plate Compatible with pitch from 240mm, 284 to 350mm on Trapezoidal sheets.

Technical Snapshot					
Ref.	**Material**	**Finish**	**Weight**	**Minimum Breaking Strength**	**Conforms to**
SA 87A(E)350	Stainless Steel 316	Body: ED coated grey Swivel Anchor Eye: Electropolished	2.12 kg	15kN	**EN 795:2012 Type A AS/NZS 5532:2013**
SA 87A(I)350		Body: ED coated Grey Intermediate: Electropolished	1.96 kg		**EN 795:2012 Type C AS/NZS 5532:2013**
SA 87A(C)(90)350		Polished with ED coated	2.46 kg		**EN 795:2012 Type C AS/NZS 5532:2013**

ANCHOR POSTS

Scan here for a virtual tour of the product



ANCHOR POST EYE FOR STANDING SEAM ROOF

Ref. SA 116S(E)

GENERAL FEATURES

- Designed to be fixed on standing seam roofs with the help of suitable seam clamps.
- Anchorage eye on the top provide universal connection as an anchorage point.
- Can be installed on upto 23mm bulb size on standing seam roof.
- Compatible with different seam distance between 320mm to 650mm.



ANCHOR POST INTERMEDIATE FOR STANDING SEAM ROOF

Ref. SA 116S(I)

GENERAL FEATURES

- Designed to be fixed on standing seam roofs with the help of seam clamps.
- Intermediate plate on the top provide connection as an intermediate.
- Can be installed on upto 23mm bulb size on standing seam roof.
- Compatible with different seam distance between 320mm to 650mm.



ANCHOR POST CORNER FOR STANDING SEAM ROOF

Ref. SA 116 S(C)(90)

GENERAL FEATURES

- Roof Top corner post designed to be fixed on Standing seam roof at bend of horizontal lifeline.
- The anchor is compatible with 320.0 mm to 650.0 mm seam to seam distance.

Technical Snapshot

Ref.	Material	Installed on	Finish	Weight	Minimum Breaking Strength	Max. Users	Conforms to
SA 116S(E)	Aluminium Alloy and Stainless Steel	Standing Seam	Natural Silver/ Colored Anodized	2.90kg	15kN	1 user	**EN 795:2012 Type A ANSI Z359.1:2007 AS/NZS 5532:2013 TS 16415:2013 (for 4 users)**
SA 116S(I)				2.70kg		NA	NA
SA 116S(C)(90)			Electropolished	3.25kg		NA	**EN 795:2012 Type A AS/NZS 5532:2013**

NEW



CONSTANT FORCE ENERGY ABSORBER EXTREMITY FOR TRAPEZOIDAL ROOF

Ref. SA 38A(E)N

GENERAL FEATURES

- Extremity post designed for 4 users & to be installed on trapezoidal roof top.
- Easy and quick to install.
- The post deploys in event of a fall to absorb the energy hence leaves the roof panel intact to maintain architectural integrity.
- Comes with series of holes to adopt different trapezoidal roof. It is compatible with below mentioned pitch:- 200, 250, 275, 300, 304, 334, 347, 367 mm

NEW



CONSTANT FORCE ENERGY ABSORBER INTERMEDIATE FOR TRAPEZOIDAL ROOF

Ref. SA 38A(I)N

GENERAL FEATURES

- Intermediate post designed for 4 users & to be installed on metal pitched roof.
- Easy and quick to install.
- The post deploys in event of a fall to absorb the energy hence leaves the roof panel intact to maintain architectural integrity
- Comes with series of holes to adopt different trapezoidal roof. It is compatible with below mentioned pitch:- 200, 250, 275, 300, 304, 334, 347, 367 mm

NEW



CONSTANT FORCE ENERGY ABSORBER CORNER BEND 90° FOR TRAPEZOIDAL ROOF TOP

Ref. SA 38A(C)(90)N

GENERAL FEATURES

- Corner post designed for 4 users & to be installed on trapezoidal roof top.
- Easy and quick to install.
- The post deploys in event of a fall to absorb the energy hence leaves the roof panel intact to maintain architectural integrity.
- Comes with series of holes to adopt different trapezoidal roof. It is compatible with below mentioned pitch:- 200, 250, 275, 300, 304, 334, 347, 367 mm

Technical Snapshot

Ref.	Material	Installed on	Finish	Weight	Minimum Breaking Strength	Conforms to
SA 38A(E)	Shock absorber assembly- Stainless Steel Base plate- Aluminium Alloy	Standing Seam	Electropolished / ED Coated	3.74 kg ± 0.05 kg	15kN	**EN795:2012 Type A TS16415:2013 Type A**
SA 38A(I)				3.77 Kg ± 0.05 Kg		**EN795:2012 Type C TS16415:2013 Type C**
SA 38A(C)(90)				4.37 Kg ± 0.05 Kg		

NEW



CONSTANT FORCE ENERGY ABSORBER EXTREMITY FOR STANDING SEAM ROOF

Ref. SA 51A(E)N

GENERAL FEATURES

- Extremity post designed for 4 users to be installed on variety of standing seam roof.
- It is designed to be installed on standing seam roof top with help of specially designed fixed clamps & supplied fasteners.
- Easy and quick to install with help of fixed block that accommodate bulb size up to 23.0mm.
- Compatible with Aluminium rebar hook (PN 1005).
- The post deploys in event of a fall to absorb the energy hence leaves the roof panel intact to maintain architectural integrity.
- Comes with series of holes to adopt different metal pitched roof. It is compatible with below mentioned pitch:- 300.0 mm, 400.0 mm.

NEW



CONSTANT FORCE ENERGY ABSORBER INTERMEDIATE FOR STANDING SEAM ROOF

Ref. SA 51A(I)N

GENERAL FEATURES

- Intermediate post designed for 4 users to be installed on variety of standing seam roof.
- It is designed to be installed on standing seam roof top with help of specially designed fixed blocks & supplied fasteners.
- Easy and quick to install with help of fixed block that accomodate bulb size up to 23.0mm.
- The post deploys in event of a fall to absorb the energy hence leaves the roof panel intact to maintain architectural integrity.
- Comes with series of holes to adopt different metal pitched roof. It is compatible with below mentioned pitch:- 300.0 mm, 400.0 mm.

NEW



CONSTANT FORCE CORNER POST FOR STANDING SEAM ROOF

Ref. SA 51A(C)(90)N

GENERAL FEATURES

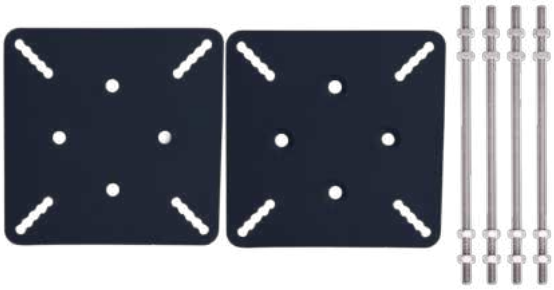
- Roof top anchor post corner is designed for 4 users, to be fixed on variety of standing seam roof tops at the bends of a horizontal lifeline. 4 users to be installed on variety of standing seam roof.
- It is designed to be installed on standing seam roof top with help of specially designed fixed blocks & supplied fasteners.
- Easy and quick to install with help of fixed block that accommodate bulb size up to 23.0mm.
- The post deploys in event of a fall to absorb the energy hence leaves the roof panel intact to maintain architectural integrity.
- Comes with series of holes to adopt different metal pitched roof. It is compatible with below mentioned pitch:- 300.0 mm, 400.0 mm.

Technical Snapshot

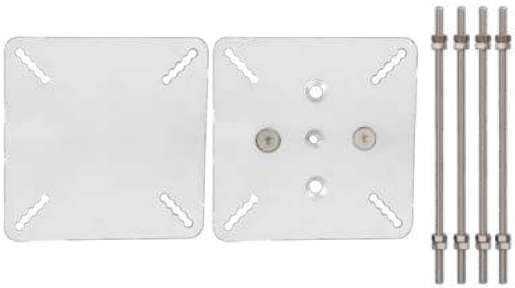
Ref.	Material	Finish	Weight	Minimum Breaking Strength	Conforms to
SA 51A(E)N	Stainless Steel	Electropolished / ED Coated	4.67 kg ± 0.05 kg	15kN	**EN795:2012 Type A TS16415:2013 Type A**
SA 51A(I)N			4.70 kg ± 0.05 kg		**EN795:2012 Type C TS16415:2013 Type C**
SA 51A(C)(90)N			5.30 kg ± 0.05 kg		

FOR EXTREMITY

- Compatible with Minimum Flange width: 150.0 mm
- Compatible with Maximum Flange width: 220.0 mm



Extremity Anchor Plate
Ref. SA 22

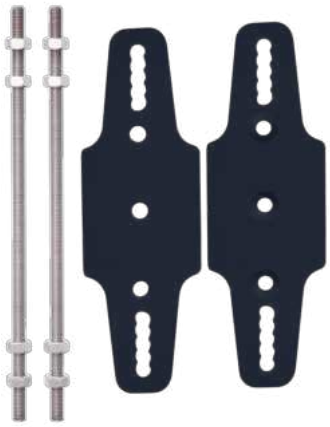


Stainless Steel Extremity Anchor Plate
Ref. SA 22SS

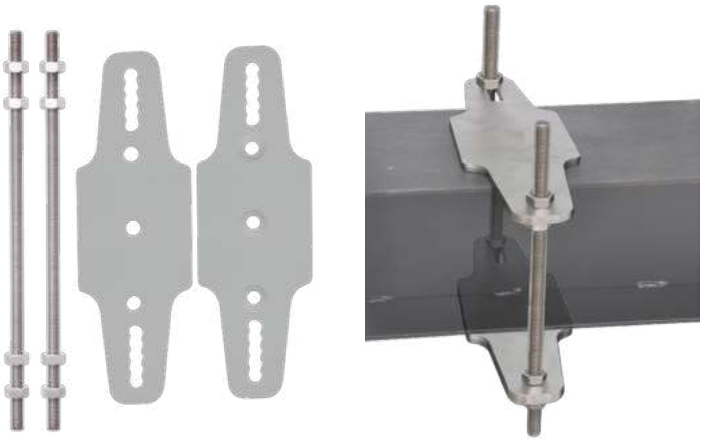
Ref.	Material	Finish	Weight	Minimum Breaking Strength	Conforms to
SA 22	Alloy Steel	Powder Coated Black	12.45kg	15kN	**EN795:2012 Type A, TS16415:2013 Type A**
SA 22SS	SS Grade 316	Electropolished / ED Coated	10.18kg		

FOR INTERMEDIATE

- Compatible with Minimum Flange width: 150.0 mm
- Compatible with Maximum Flange width: 220.0 mm



Intermediate Anchor Plate
Ref. SA 23



Stainless Steel Intermediate Anchor Plate
Ref. SA 23SS

Ref.	Material	Finish	Weight	Minimum Breaking Strength	Conforms to
SA 23	Alloy Steel	Powder Coated Black	3.87kg	NA	NA
SA 23SS	SS Grade 316	Electropolished / ED Coated	3.19kg		

ANCHOR POSTS

- Anchor designed to be fixed on metal i beam to install horizontal lifeline.
- The base have an adjustable opening to adopt to the type of beam section.
- Easy and quick to install with help of nut & bolt (M12).
- Post comes with M16 tapped bush to fix connectors such as swivel d-ring, eye bolt etc to be used as anchorage point.
- Compatible with flange width minimum 150.0mm maximum 220.0mm.



ANCHOR POST

Ref. SA 111(300) / SA 111(500) / SA 111(750)

- Available Lengths(l) -
  SA111(300) - 300 mm
  SA111(500) - 500 mm
  SA111(750) - 750 mm



ANCHOR POST

Ref. SA 111(12") / SA 111(18")

- Available Lengths(l) -
  SA 111(12") - 12 inches
  SA 111(18") - 18 inches

NEW



ANCHOR

Ref. SA 115

- Anchor is designed to be used as a mounting bracket for anchors or anchorage line.
- Comes with adjustable opening to adopt to the different size of steel angle structures from 75mmx75mm to 200mmx200mm.
- Anchor is suitable to fix on corners of steel angle legs of lattice towers or similar structures.

Technical Snapshot					
Ref.	**Material**	**Finish**	**Weight**	**Minimum Breaking Strength**	**Conforms to**
SA 111(300)	Alloy Steel	Powder Coated Black Electropolished	5.76kg	15kN	**EN 795: 2012 Type A**
SA 111(500)			15.87kg		
SA 111(750)			17.85kg		
SA 111(12") **SA 111(18")**			7.87kg 9.87kg	23kN	**ANSI Z359.18:2017 Type A**
SA 115			2.46kg	12kN	**EN 795: 2012 Type A**

NEW

WALKWAYS, TREADS AND STEPS FOR ROOFS

FEATURES

- For providing safe walking on any roof surface
- Meets the test requirements of EN 516:2006 Class 1-Type C (Prefabricated Accessories for Roofing Installations for roof access - Walkways, treads and steps)
- Available in pre-assembled lengths
- Easy to install at site
- Fire retardant
- Long life span
- It can be used along with Horizontal Lifeline Systems designed for over the roof.
- Tailor made solutions are also available
- Indigenously made
- Designed for all type of roofing like trapezoidal, clip on and standing seam profiles.
- Flexible for installation at site and can be adjusted from 0˚ to 48˚
- Corrosion and moisture resistant material.
- Available as steps for steep slopes with hand rails

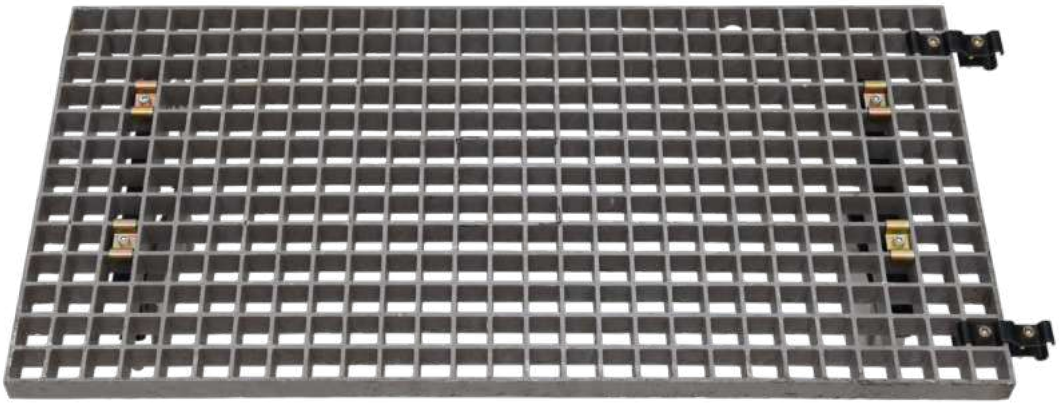


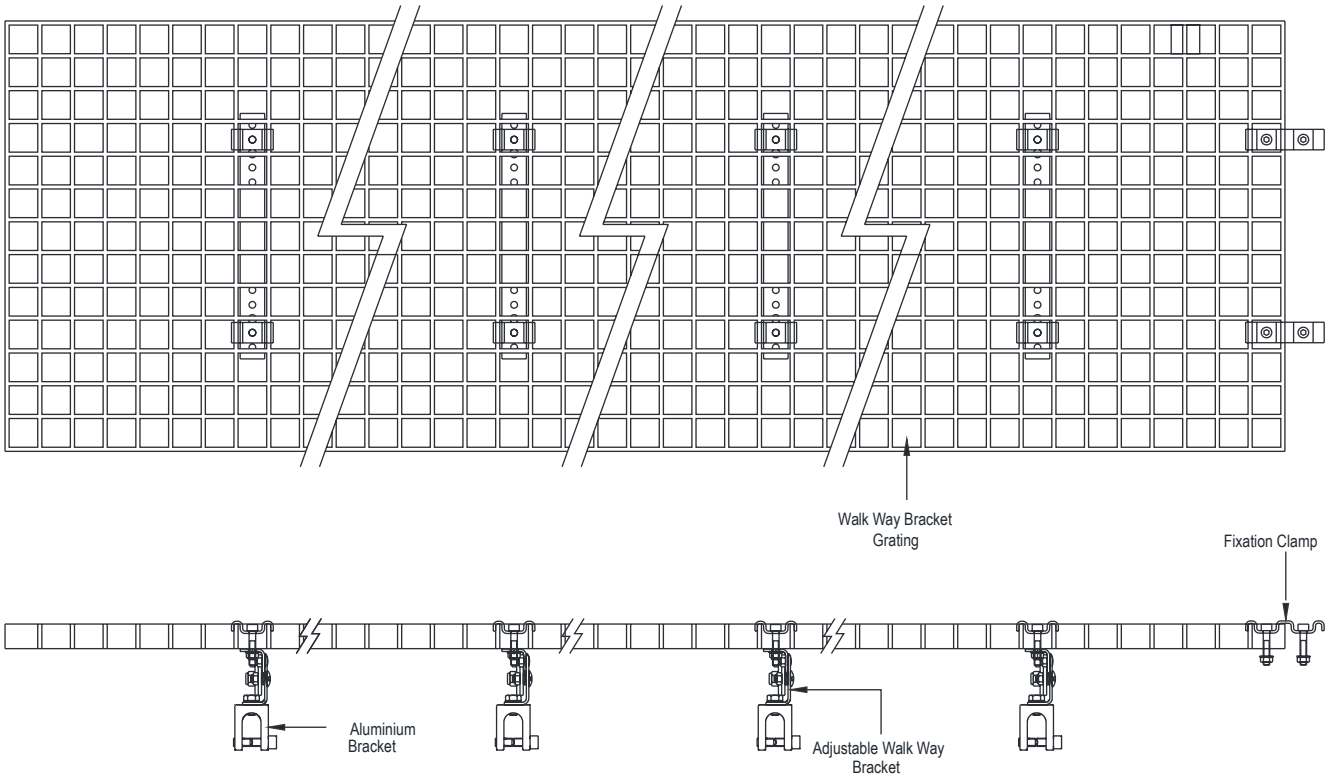
NEW

WALKWAYS ON STANDING SEAM ROOF

Ref.: WW 01(21)S

- Walkway Grating specially designed to be fixed on Standing seam roof with specialized bracket & clamps.
- Walkway Grating for standing seam roof to provide safe anti-slip access to roof structures having roof angle from 0° to 48°.
- Fixed seam clamps to fix the walkway bracket with roof .
- Maximum span length between two consecutive brackets is 800mm to 1000mm.





Technical Snapshot				
Ref.	**Item**	**Material**	**Weight**	**Conforms to**
WW 01(21)S	Grating	Fiber reinforced plastic	33.74 kg ± 0.200 kg	**EN 516:2006 CLASS 1**
	Bracket	High strength Aluminium alloy and SS		
	Fixed Block	High strength Aluminium alloy		

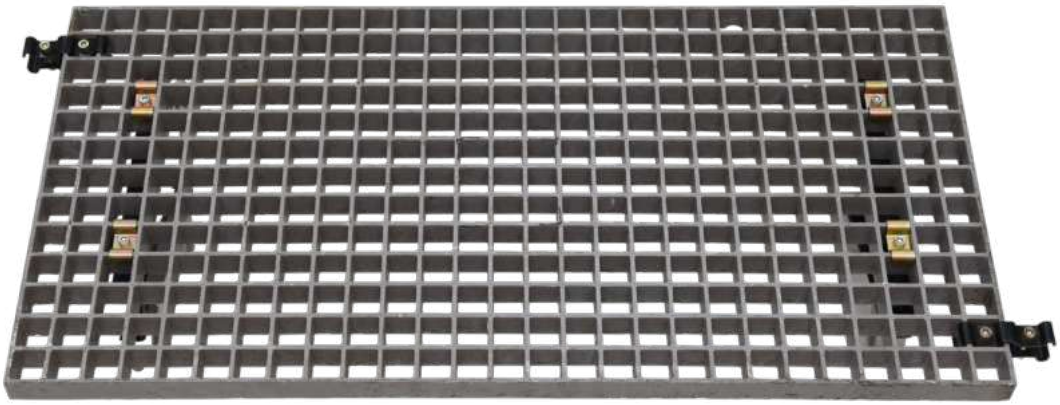
**Images incorporated here are for illustration purpose, actual product may vary as per size, demand and needs*

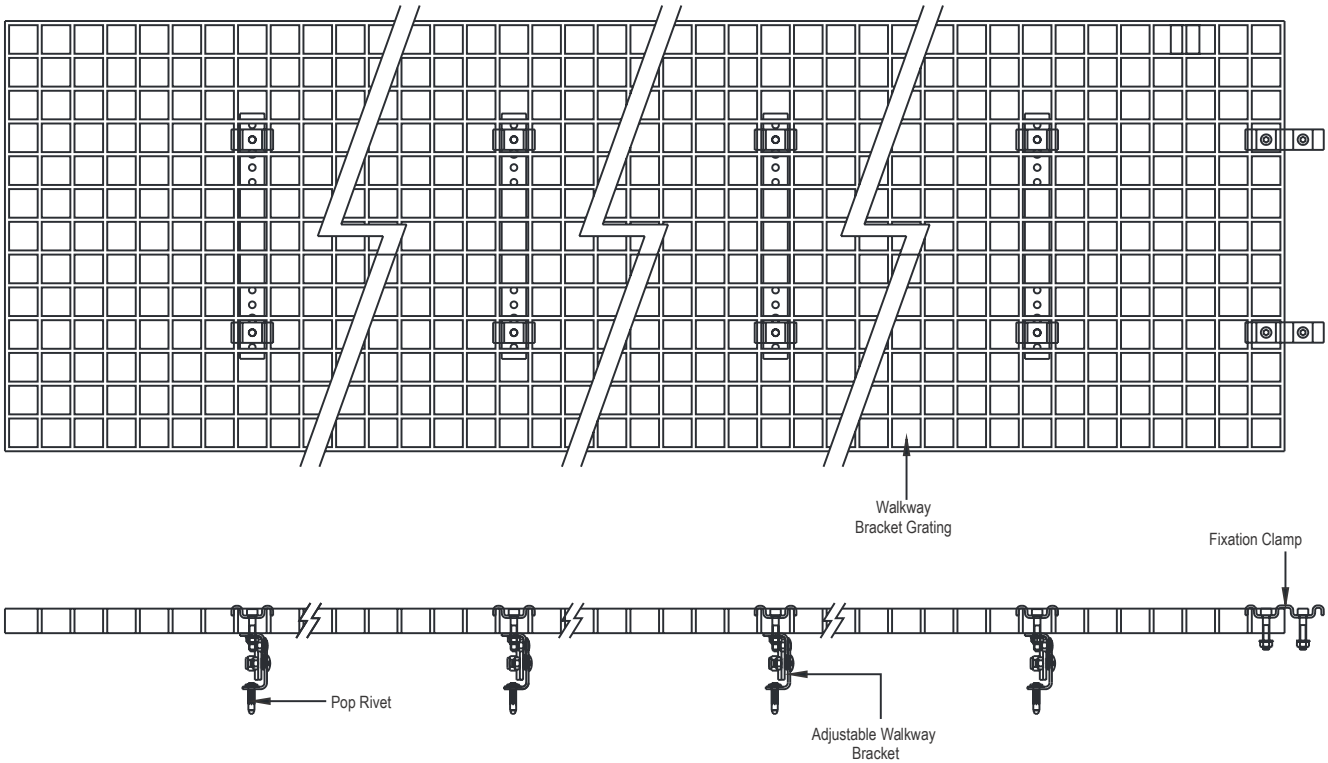
NEW

WALKWAY ON TRAPEZOIDAL SEAM ROOF

Ref. WW 01(21)T

- Walkway Grating for Trapezoidal sheet roof to provide safe anti-slip access to roof structures having roof angle from 0° to 48°.
- Walkway Grating specially designed to be fixed on Trapezoidal seet roof with specialized bracket & clamps.
- Pop rivets to fix the walkway bracket with roof .
- Maximum span length between two consecutive brackets is 800mm to 1000mm.





Technical Snapshot				
Ref.	**Item**	**Material**	**Weight**	**Conforms to**
WW 01(21)T	Grating	Fiber reinforced plastic	32.58 kg ± 0.20 kg	**EN 516: 2006 CLASS 1**
	Bracket	High strength Aluminium alloy and SS		

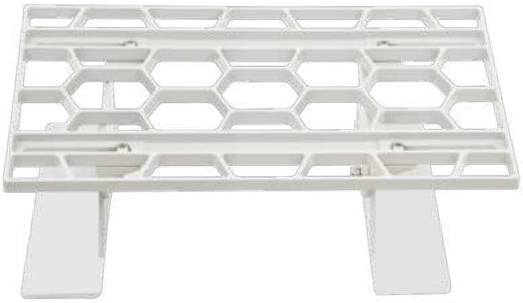
**Images incorporated here are for illustration purpose, actual product may vary as per size, demand and needs*

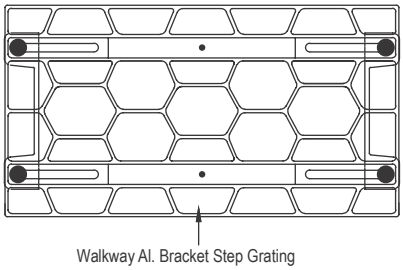
WALKWAY ALUMINIUM STEP FOR STANDING SEAM ROOF AND TRAPEZIODAL ROOF

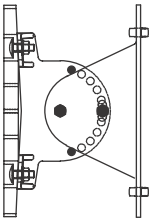
NEW

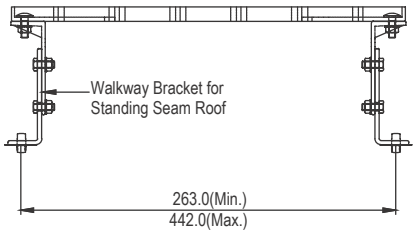
Ref.: WW 03T

- Walkway steps for Trapezoidal roof to provide safe antislip access to roof structures having roof angle from 0° to 48°.
- Walkway steps specially designed to be fixed on Trapezoidal roof with specialized bracket & rivets.
- Pop rivets to fix the bracket with roof .





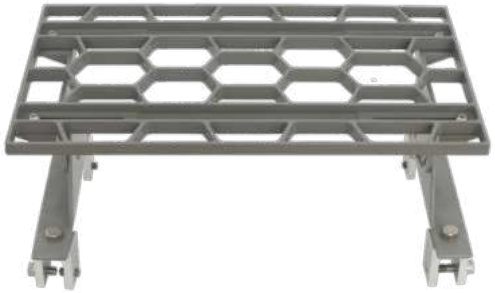


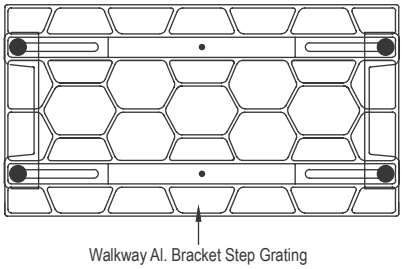


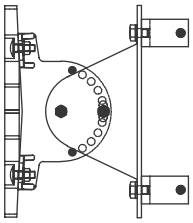
NEW

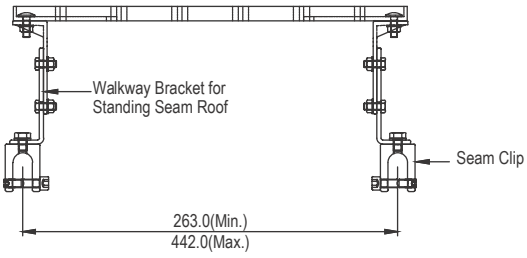
Ref.: WW 03S

- Walkway steps for standing seam roof to provide safe antislip access to roof structures having roof angle from 0° to 48°.
- Walkway steps specially designed to be fixed on Standing seam roof with specialized bracket & clamps.









Technical Snapshot			
Ref.	**Material**	**Finish**	**Weight**
WW 03T	Grating	Aluminium Alloy (AA 231)	12.6 kgs. ± 0.10 kgs.
	Bracket	Aluminium Alloy (AA 231)	
	Pop Rivet	Aluminium [6005(T6)]	
	Nut and Bolts	Stainless Steel (SS-316)	
WW 03S	Grating	Aluminium Alloy (AA 231)	13.12 kgs. ± 0.10 kgs.
	Bracket	Aluminium Alloy (AA 231)	
	Seam Clip	Aluminium [6005(T6)]	
	Nut and Bolts	Stainless Steel (SS-316)	

**Images incorporated here are for illustration purpose, actual product may vary as per size, demand and needs*

NEW

C-CHANNEL ASSEMBLY FOR WALKWAY ON STANDING SEAM ROOF

Ref. WW 01(29)S

- C-Channel assembly is designed to install the walkway on standing seam roof.
- Comes with clamps to fix the channels on standing seams and also with fixation clamps to fix the walkway on it.



NEW

WALKWAY WIDE BRACKET WITH FIXATION CLAMP

Ref. WW 01S(SS)SUB3

- Walkway bracket for Standing seam roof with wide bottom to provide safe anti-slip access to roof structures having roof angle from 0° to 48°.
- Walkway SS Bracket specially designed to be fixed on Standing seam roof with clamps.
- Maximum span length between two consecutive brackets is 800mm to 1000mm or 3 brackets per 3 meter long grating.
- Comes with two fixation clamps to install the grating on this bracket.



NEW

C-CHANNEL ASSEMBLY FOR WALK WAY ON TRAPEZOIDAL ROOF

Ref. WW 01(29)T

- C-Channel assembly is designed to install the walkway on trapezoidal sheet roof.
- Can be used after drilling on different pitch upto 610.0mm.
- Comes with pop rivet to fix the channels on trapezoidal roof & also with fixation clamps to fix the walkway on it.



NEW

C-CHANNEL

Ref. WW 01(29)SUB1

- C-Channel assembly is designed to install the walkway on trapezoidal sheet roof.
- Can be used after drilling on different pitch upto 610.0mm.



Technical Snapshot			
Ref.	**Material**	**Finish**	**Weight**
WW 01(29)S	C-Channel and Brackets : Aluminium Fixation Clamps and Fasteners : Stainless Steel	C-Channel and Brackets : Anodized Fixation Clamps and Fasteners : Electropolished / E Coated	1.36 kgs. ± 0.05 kgs.
WW 01(29)T			1.20 kgs. ± 0.05 kgs.
WW 01(29)SUB1			1.00 kgs. ± 0.05 kgs.
WW 01S(SS)SUB3	Stainless Steel (SS-316)	Electropolished / E-Coated	1.36 kgs. ± 0.05 kgs.

**Images incorporated here are for illustration purpose, actual product may vary as per size, demand and needs*

NEW

ALUMINIUM BRACKET FOR STANDING SEAM POST

Ref. WW 01(10)

- Fixed block clamps are designed to fix KARAM walk-way platforms, corners, extremities or intermediates on standing seam roof.
- Clamp can accomodate up to 23.0mm wide standing seam bulb size.
- Comes with specially designed screws to avoid damage to the roof.



Ref. WW 01(39)

- Fixed block clamps are designed to fix KARAM walkway platforms,corners, extremities or intermediates on standing seam roof.
- Clamp can accomodate up to 30.0mm wide standing seam bulb size.
- Comes with specially designed screws to avoid damage to the roof.



Technical Snapshot			
Ref.	**Material**	**Finish**	**Weight**
WW 01(10)	High strength Aluminium alloy.	Anodized.	0.250 kg ± 0.050 kg
WW 01(39)			0.290 kg ± 0.050 kg

NOTE

SAFETY FAN NET



NEW

KARAM Safety Fan Nets are an ideal choice to protect construction workers from falling off from unguarded edges. It acts as a collective protection from and for falling objects.

The Safety Fan Net is useful in providing safety to workers on high rise buildings, especially where space is a constraint in installing a safety net. Protect the work force from falling and the pedestrians from getting hit by tools or debris that may fall from heights.

The KARAM Safety Fan Nets are modular and can be installed on different building shapes including corners.

For access to cranes or for protection from high winds/snow, the safety fan nets are designed to be folded.

Scan here *for a virtual tour of the product*

SAFETY FAN NET

Ref. PNF 01



CE

EN 1263-1:2014
(System T and System S)
and EN 1263-2:2014

Salient Features:

- An ideal solution to protect the site workers, public and property from falling objects and fall hazards
- Provides safety on high-rise buildings, especially where space is a constraint.
- Protects general public from getting hit by tools or debris that may fall from a height.
- Can cover a large area by overlapping multiple units of safety fan nets.
- Can be installed on different building shapes including corners.
- Fits directly to the building steel or concrete frame using a range of attachments.



SAFETY NET
Protects from a fall and also protects people on the ground from falling debris/tools from overhead.



FAN NET VERTICAL FRAME
The Vertical Frame designed to hold the Fan Net System between the slabs. It is works like the backbone of the entire system, hosting other parts like Vertical Fan Net Extension Leg, Wind Protect Attachment etc.



ALUMINIUM TUBES
The Aluminium Tubes provide horizontal and diagonal support to the safety net and allow shock absorption in the event of a fall.



VERTICAL FAN NET EXTENSION LEG
The Vertical Fan Net Extension Leg provides extended support and length to the Fan Net Vertical Frame using adjustment holes.



COUPLER ROUND TO SQUARE TUBE
Specially designed to connect Round Fan Net Aluminum Tube with Square Shape Vertical Frame.



COUPLER ROUND TO ROUND
Specially designed to connect one Round Fan Net Aluminum Tube (Diagonal) with another Round Fan Net Aluminum Tube (Horizontal)



SLAB ATTACHMENT - TOP
The Slab Attachment-Top holds the Safety Fan Net System to the slab/structure.



SLAB ATTACHMENT - BOTTOM
Designed to provide support to the Fan Net System from the lower side of the slab/structure.



NET STOPPER KARABINER
The Net Stopper Karabiners, inserted at the ends of the horizontal tubes ensure that the net stays stretched till the edges at all times.



NET FOLDING EYE SET
Used to fold and unfold the Safety Fan Net.



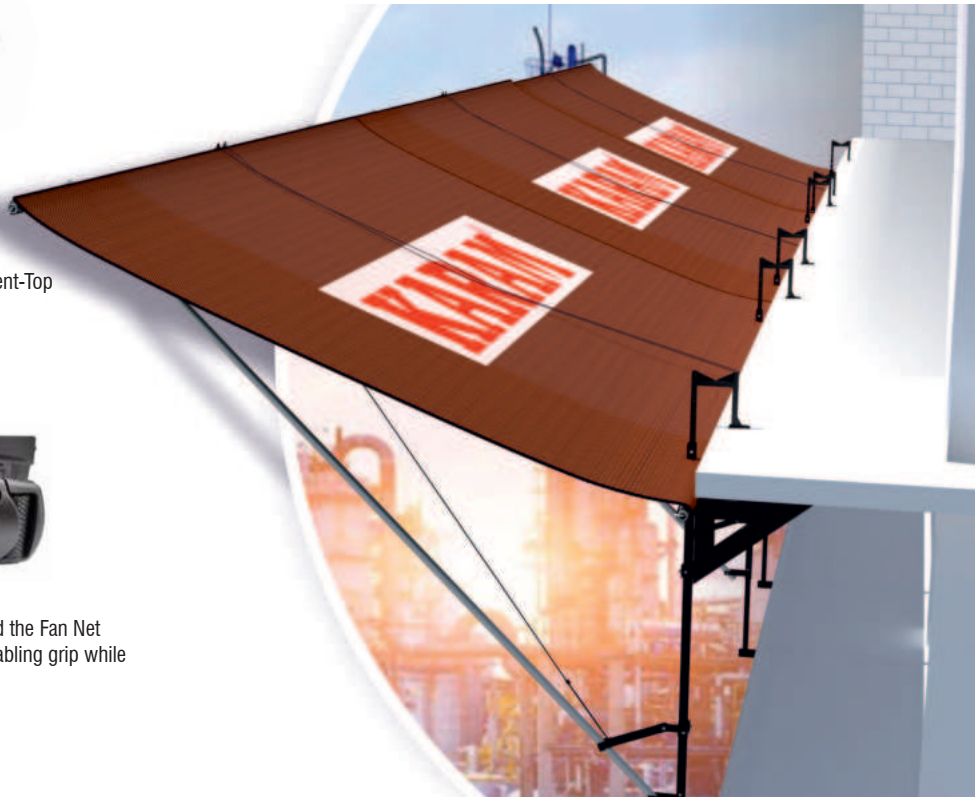
WIND PROTECT ATTACHMENT
The Wind Protection Attachment prevents the net from closing on an occasion of fall and holds the Fan Net intact.



EXPANSION FASTENER
Anchors the Slab Attachment-Top to the floor/base.



FASTENING BELT
Ties the diagonal tubes and the Fan Net Vertical Frame together enabling grip while lifting the Fan Net.



Ref. No.	Products Name	Page No.
ALGS 04	Retractable Block in Aluminium Casing	320
ALGS 05	Retractable Block in Aluminium Casing	320
ALGS 06	Retractable Block in Aluminium Casing	320
ALGS 7.5	Retractable Block in Aluminium Casing	320
ALGS 10	Retractable Block in Aluminium Casing	320
ALGS 12	Retractable Block in Aluminium Casing	320
ALGS 15	Retractable Block in Aluminium Casing	320
ALGS 18	Retractable Block in Aluminium Casing	320
ALGS 20	Retractable Block in Aluminium Casing	320
ALWB 04	Retractable Block in Aluminium Casing	320
ALWB 05	Retractable Block in Aluminium Casing	320
ALWB 06	Retractable Block in Aluminium Casing	320
ALWB 7.5	Retractable Block in Aluminium Casing	320
ALWB 08	Retractable Block in Aluminium Casing	320
ALWB 10	Retractable Block in Aluminium Casing	320
ALWB 12	Retractable Block in Aluminium Casing	320
ALWB 2X2	Twin Retractable Block	321
AP 001	Steel Single Pulley Single Side Attachment	350
AP 002	Steel Single Pulley Double Side Attachment	350
AP 011	Aluminium Single Pulley Single Side Attachment	350
AP 011A	Aluminium Small Single Pulley Single Side Attachment	350
AP 012	Aluminium Single Pulley Single Side Attachment	350
AP 013	Aluminium Double Pulley Double Side Attachment	351
AP 014	Aluminium Single Pulley Double Side Attachment	351
AP 015	Double Tandem Pulley Big with SS Sheaves	352
AP 016	Double Tandem Pulley Small with SS Sheaves	352
AP 016A	Double Tandem Pulley Small with Manganese Bronze Sheaves	352
AP 017(SS)(BB)	Aluminium Double Pulley Double Side Attachment	351
AP 018	Ratchet Pulley System	353
AP 025	Aluminium Single Pulley Double Side Attachment	351
ARC 02	Edge Protector	301
ARC 04	Rope Termination Anchor	349
BC 01	Anchor	292
DA 01	H-Base Davit	332
DA 01(SUB3)	H-Base Sub Assembly Complete for Davit	332
DA 01(SUB4)	Lower Mast (54 Inch)	332
DA 01(SUB5)	Lower Mast (36 Inch)	332
DA 02	Floor Mounted Davit	334
DA 03	Wall Mounted Davit	334
DA 04 (06)	Upper Offset Mast(boom)	332
DA 05(07)	Tow-Hitch	338
DA 05	Hitch Mounting Davit	336
DA 05(Sub1)	Lower Mast	338
DA 06	Flush Mounted Davit	338
DA 06 (SUB1)	Core Mounting Sleeve Assembly	338
DA 06 (SUB1) EC	Core Mounting Sleeve Assembly	338
DA 07	Flush Mounted Davit	338
DA 07(04)SUB2	Dead Weight(26 Nos.)	340
DA 07SUB2	Trolley	340
DA 08	Flush Mounted Davit	338
DA 08 (10)	Pole Hoist Davit Anchor	342
EP 01(Uncorded)	Disposable Foam Ear Plug	77
EP 02(A)	Disposable Foam Ear Plug Nylon Thread	77
EP 02(A)	Disposable Foam Ear Plug Nylon Thread	77
EP 03(CC)	Packing for Disposable Foam Ear Plug	80
EP 03(Uncorded)	Reusable Ear Plug	77
EP 04(Corded)	Reusable Ear Plug	77
EP 21	Ear Muff Classic	78
EP 22	Ear Muff Foldable Elegant	79
EP 23	Helmet Attachable Ear Muff	79
EP 24	Ear Muff High dB Foldable	80
EP 300	Dispenser for EP 01 Ear Plugs	77
ES 001(Clear)	General Series of Spectacle - Economical	61
ES 001(Clear)(PK)	General Series of Spectacle - Economical	61
ES 001(NG)	General Series of Spectacle - Economical	61
ES 001(Smoked)	General Series of Spectacle - Economical	61
ES 001(Smoked)(NG)	General Series of Spectacle - Economical	61
ES 003	Welder's Choice Spectacle	66
ES 004	Welder's Choice Spectacle	66
ES 005	General Series of Spectacle - Economical	61
ES 005(Smoked)	General Series of Spectacle - Economical	61
ES 006	General Series of Spectacle - Premium	62
ES 006(Indoor/Outdoor)	General Series of Spectacle - Premium	62
ES 007	Over Spectacle	64
ES 007(Clear)(NG)	Over Spectacle	64
ES 008	Chemical Environment User's Choice Goggle	65
ES 009	Chemical Environment User's Choice Goggle	65
ES 009(Smoked)	Chemical Environment User's Choice Goggle	65
ES 015(Amber)(MB)	General Series of Spectacle - Premium	62

Ref. No.	Products Name	Page No.
ES 015(Clear)	General Series of Spectacle - Premium	62
ES 015(Clear)(NG)	General Series of Spectacle - Premium	62
ES 015(Smoked)	General Series of Spectacle - Premium	62
ES 015(Smoked)(MB)	General Series of Spectacle - Premium	62
ES 015(Smoked)(NG)	General Series of Spectacle - Premium	62
ES 017	General Series of Spectacle - Premium	62
ES 018	General Series of Spectacle - Premium	62
ES 019	General Series of Spectacle - Premium	62
ES 51	Face Shield	85
ES 52	Clear Polycarbonate Face Shield with Ratchet Type Headgear	85
ES 61	Welding Helmet	86
ES 71	Helmet Mountable Welding Shield	86
ESA 01	Spectacle Accessories	66
ESA 02	Spectacle Accessories	66
FS 01	Safety Shoe with Double Density PU/PU Sole	169
FS 01RO	Safety Footwear with PU Nitrile Sole	187
FS 02	Safety Shoe with Single Density PU Sole	177
FS 04	Safety Shoe with Single Density PU Sole	177
FS 05	Safety Shoe with Single Density PU Sole	177
FS 055	Safety Shoe with Single Density PU Sole	177
FS 05RO	Safety Footwear with PU Nitrile Sole	187
FS 13	Abawrf Premium Shoe	166
FS 14	Abawrf Executive Shoe	166
FS 15	Abawrf Reflective Shoe	166
FS 21	Safety Shoe with Double Density PU/PU Sole	169
FS 21RO	Safety Footwear with PU Nitrile Sole	187
FS 22	Safety Shoe with Double Density PU/PU Sole	169
FS 25	Abawrf High Ankle Shoe	167
FS 258BL	FalkonRange Safety Shoe	155
FS 51	Safety Shoe with Double Density PU/PU Sole	169
FS 61	Safety Shoe with Double Density PU/PU Sole	169
FS 62	Safety Shoe with Double Density PU/TPU Sole	173
FS 63	Safety Shoe with Double Density PU/TPU Sole	173
FS 64	Safety Shoe with Double Density PU/TPU Sole	173
FS 65	Safety Shoe with Double Density PU/TPU Sole	173
FS 65RO	Safety Footwear with PU Nitrile Sole	187
FS 69	Safety Shoe with Single Density PU Sole	177
FS 71	Safety Shoe with Single Density PU Sole	177
FS 72	Safety Shoe with Single Density PU Sole	177
FS 73	Safety Shoe with Single Density PU Sole	177
FS 100	Safety Shoe with Single Density PU Sole	177
FS 101	Safety Shoe with Single Density PU Sole	177
FS 111RO	Safety Footwear with PU Nitrile Sole	187
FS 112RO	Safety Footwear with PU Nitrile Sole	187
FS 113RO	Safety Footwear with PU Nitrile Sole	187
FS 150	Safety Shoe with Single Density PU Sole	177
FS 151	Safety Shoe with Single Density PU Sole	177
FS 152	Safety Shoe with Single Density PU Sole	177
FS 201	Flytex Safety Footwear (Grey and White)	161
FS 202	Flytex Safety Footwear (Red and Black)	161
FS 203	Flytex Safety Footwear (Blue and Black)	161
FS 204	Flytex Safety Footwear (Blue and Black with Laces)	162
FS 208	Flytex Safety Footwear (White and Black)	163
FS 210	Flytex Safety Footwear (Orange and Black with Laces)	163
FS 213	Flytex Safety Footwear (Red and Grey with Laces)	163
FS 215	Flytex Safety Footwear (Red and Black with Laces)	164
FS 226	Safety Shoe with Single Density PU Sole	177
FS 231	Safety Shoe with Single Density PU Sole	177
FS 232	Safety Shoe with Single Density PU Sole	177
FS 251BL	FalkonRange Safety Shoe	155
FS 251GR	FalkonRange Safety Shoe	155
FS 252OL	FalkonRange Safety Shoe	155
FS 253(MT)(RO)	Metatarsal Shoe	159
FS 259 BLUE	FalkonRange Safety Shoe	155
FS 260BL	FalkonRange Safety Shoe	155
FT01	Industrial Safety Helmet	56
FT11	Industrial Safety Helmet	56
FT101	Frontier Spectacle	69
FT101 (Smoked)	Frontier Spectacle	69
FT111	Frontier Spectacle	69
FT111 (Clear)	Frontier Spectacle	69
FT111 (Smoked)	Frontier Spectacle	69
FT121	Frontier goggle	70
FT131	Frontier Spectacle	69
FT141	Frontier Spectacle	69
FT151	Frontier Spectacle	69
FT161	Frontier goggle	70
FT171(Clear)	Face Visor	88
FT171(IR05)	Face Visor	88

Ref. No.	Products Name	Page No.
FT171(01)	Aluminium Cap Frame	87
FT171(02)	Plastic Cap Frame	87
FT201	Ear Muff	81
FT351(P1)	Disposable Flat Fold Respirator with Headstrap	29
FT351(P2)	Disposable Flat Fold Respirator with Headstrap	29
FT361(P1)	Disposable Flat Fold Respirator with Headstrap	29
FT361(P1)+	Disposable Flat Fold Respirator with Head Strap and Exhalation Valve	32
FT361(P2)(OV)+	Disposable Welding Flat Fold Respirator with Exhalation Valve	33
FT361(P3)+	Disposable Flat Fold Respirator with Head Strap and Exhalation Valve	32
FT381	3-Ply Surgical Mask	37
FT391(P2)+	Disposable Cup Shape Respirator with Head Strap and Exhalation Valve	35
FT391(P3)+	Disposable Cup Shape Respirator with Head Strap and Exhalation Valve	35
FT401	Hand Protection Grip and General Purpose Glove	129
FT404	Hand Protection Grip and General Purpose Glove	129
FT405	Hand Protection Grip and General Purpose Glove	129
FT406	Hand Protection Grip and General Purpose Glove	129
FT408	Hand Protection Grip and General Purpose Glove	129
FT409	Hand Protection Grip and General Purpose Glove	129
FT451	Multi Purpose Heavy Duty Glove	132
FT452	Multi Purpose Heavy Duty Glove	132
FT453	Chemical Resistant Glove	134
FT501	Mechnical and Cut Resistant Glove	136
FT551	Chemical Resistant Glove	134
FT552	Chemical Resistant Glove	134
FT601	Cotton and Synthetic Glove	137
FT602	Cotton and Synthetic Glove	137
FT603	Cotton and Synthetic Glove	137
FT604(DD)	Cotton Knitted Double Dotted Glove	138
FT604(SD)	Cotton Knitted Single Dotted Glove	139
FT605(DD)	Cotton Knitted Double Dotted Glove	138
FT605(SD)	Cotton Knitted Single Dotted Glove	139
FT606(DD)	Cotton Knitted Double Dotted Glove	138
FT606(SD)	Cotton Knitted Single Dotted Glove	139
FT611	Cotton and Synthetic Glove	137
FT612(DD)	Cotton Knitted Double Dotted Glove	138
FT612(SD)	Cotton Knitted Single Dotted Glove	139
FT613	Cotton and Synthetic Glove	137
FT614(DD)	Cotton Knitted Double Dotted Glove	138
FT614(SD)	Cotton Knitted Single Dotted Glove	139
FT615	Cotton and Synthetic Glove	137
FT616(DD)	Cotton Knitted Double Dotted Glove	138
FT616(SD)	Cotton Knitted Single Dotted Glove	139
FT701	Arm Sleeve	141
FT703	Arm Sleeve	141
FT801(UL)(GY)(14)	Leather Safety Glove	142
FT811(P)(GY)(14)	Leather Safety Glove	142
FT811(RD)(14)	Leather Safety Glove	142
FT821(P)(BE/YW)(16)	Leather Safety Glove	142
FT821(P)(GN/YW)(16)	Leather Safety Glove	142
FT822(P)(MN)(14)	Leather Safety Glove	142
FT831(UL)(GY)(10.5)	Leather Safety Glove	142
FT832(UL)(GY)(10.5)	Leather Safety Glove	142
FT841(UL)(GY)(10)	Leather Safety Glove	142
FT842(UL) (GY)(10)	Leather Safety Glove	142
FT851(UL)(GY)(22)	Leather Arm Sleeve	142
FT851(UL)(GY)(24)	Leather Arm Sleeve	142
FT861(UL)(GY)(12)	Safety Leg Guard	97
FT871(UL)(GY)(90)	Leather Apron	97
FT1203 BL (SWSAPN)	Frontier Safety Shoe with Single Density PU Sole	192
GDU-D-110	Portable Single Gas Detector- Oxygen	194
GDU-D-210	Portable Single Gas Detector- Carbon Monoxide	194
GDU-D-310	Portable Single Gas Detector- Hydrogen Sulphide	194
HS 01	Orange Liner Glove with Black Crinkle Latex Coating	101
HS 02	Polyster Liner Glove with Natural Latex Coating	101
HS 03	Polycotton Liner Glove with Natural Latex Coating	102
HS 11	White Liner Glove with Orange Crinkle Latex Coating	102
HS 21	White Liner Glove with White PU Coating	103
HS 22	Black Liner Glove with Black PU Coating	103
HS 23	Polyester Liner Glove with Polyurethane Coating	103
HS 24	Polyester Liner Glove with Polyurethane Coating	103
HS 31	White Liner Glove with Grey Nitrile Coating	104
HS 32	Polyester Liner Glove with Nitrile Coating	104
HS 33	Polyester Liner Glove with Nitrile Coating	104
HS 34	Polyester Liner Glove with Nirile Sponge Coating	105
HS 41	HPPE Liner Glove with Grey PU Coating	106
HS 43	HPPE Liner Glove with Black Nitrile Micro Foam Coating	106
HS 44	HPPE/Glass Liner Glove with Polyurethane Coating	107
HS 46	HPPE, Glass, Nylon & Spandex Plaited Composite Knitted Liner Glove with KTCR and NFT coating	107

Ref. No.	Products Name	Page No.
HS 47	Nylon / Polyester Liner Glove with Nitrile Coating	117
HS 51	HPPE Liner Glove with Black PU Coating	108
HS 52	HPPE Liner Glove with Black Nitrile Micro Foam Coating	106
HS 53	HPPE, Glass, Nylon & Spandex Plaited Composite Knitted Liner Glove with NFT Coating	109
HS 61	HPPE Liner Glove with Blue Latex Coating	109
HS 62	HPPE / Glass Liner Glove with Polyurethane Coating	110
HS 64	Composite Ricotech Liner Glove with Nitrile Sponge	110
HS 65DD	HPPE Liner Glove with Sandy Nitrile Over Flat Nitrile Coating	111
HS 68	HPPE / Glass Liner Glove with Natural Latex Coating	111
HS 69	HPPE / Glass Liner Glove	112
HS 82	Fine gauge HPPE/Nylon/Spandex/Steel composite Knitted Liner Glove with NFT coating	112
HS 91	Red Polyester Liner Glove with Black Nitrile Fully Coated with Smooth Finish	113
HS 92 (FC)	Polyester Liner Glove with Nitrile Coating	104
HS 93 (DD)	Polyster Liner Glove Sandy Nitrile Over Flat Nitrile Coating	114
HS 151	Chemical Resistant Glove Nitrile Coating	126
HS 161	Chemical Resistant Glove Nitrile Coating Flocked Liner Glove with Neoprene Latex Blended Coating	126
HS 171	Chemical Resistant Glove Flocked Liner Glove with Neoprene Over Latex Coating	127
HS 201(KW)	Cotton Jersey Liner Glove with Nitrile Coating	116
HS 201(SC)	Cotton Jersey Liner Glove with Nitrile Coating	116
HS 202(16)	Chemical Resistant Glove Cotton Interlock Liner Glove with PVC Coating	127
HS 361(LP)	Cut and Impact Protection HPPE/Glass Liner Glove with Nitrile Sandy Coating	123
HS 401	Cut and Heat Protection Kevlar Liner Glove	121
HS 402	Cut and Heat Protection Para-Aramid Liner Glove	121
HS 403	Cut and Heat Protection Kevlar Liner Glove	121
HS 501	Disposable Glove Nitrile Coating	123
HS 502	Disposable Glove Nitrile Coating	123
HS 503	Disposable Glove Nitrile Coating	123
HS 504	Disposable Glove Nitrile Coating	123
HS 701(18)TH	Arm Protection HPPE / Glass Liner	118
HS 701(22)TH	Arm Protection HPPE / Glass Liner	118
HS 702(18)	Arm Protection HPPE / Glass Liner	118
HS 702(18)TH	Arm Protection HPPE / Glass Liner	118
HS 703(18)TH	Arm Protection HPPE / Glass Liner	118
HS 703(22)TH	Arm Protection HPPE / Glass Liner	118
HS 704(18)TH	Arm Protection HPPE / Glass Liner	118
HS 704(22)TH	Arm Protection HPPE / Glass Liner	118
IMP 003	Spreader Bar	354
IMP 004	Easy Seat	355
IMP 005	Pilot Chair	355
IMP 005(01)	Spreader Bar	354
IMP 008	Rescue Ladder System for Self-Rescue	363
KI 01	Ki Series Harness	229
KI 02	Ki Series Harness	229
LA0200-10	Load Arrester	368
LA0300-10	Load Arrester	368
LA0300-15	Load Arrester	368
LA0400-10	Load Arrester	368
LA0400-15	Load Arrester	368
LA0400-20	Load Arrester	368
LA0500-10	Load Arrester	368
LA0500-15	Load Arrester	368
LA1000-11	Load Arrester	368
LA1000-16	Load Arrester	368
MAGNA 1	Magna Harness	214
MAGNA 2	Magna Harness	214
MAGNA 3	Magna Harness	214
MIC 02	Micron Block	313
MIC12N(131N)	Micron Twin Lanyard with Shock Pack	314
PCGS 02(IS)	ISI Certified Retractable Blocks in Polymer Casing with Galvanized Steel Wire Rope	308
PCGS 3.5N	Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	315
PCGS 3.5N(SE)	Sharp Edge Tested Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	317
PCGS 05	Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	315
PCGS 05(IS)	ISI Certified Retractable Blocks in Polymer Casing with Galvanized Steel Wire Rope	308
PCGS 05(SE)	Sharp Edge Tested Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	317
PCGS 06	Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	315
PCGS 06(SE)	Sharp Edge Tested Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	317
PCGS 07	Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	315
PCGS 07(SE)	Sharp Edge Tested Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	317
PCGS 7.5	Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	315

Ref. No.	Products Name	Page No.
PCGS 7.5(IS)	ISI Certified Retractable Blocks in Polymer Casing with Galvanized Steel Wire Rope	308
PCGS 7.5(SE)	Sharp Edge Tested Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	317
PCGS 10	Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	315
PCGS 10(SE)	Sharp Edge Tested Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	317
PCGS 12	Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	315
PCGS 15	Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	315
PCGS 16(IS)	ISI Certified Retractable Blocks in Polymer Casing with Galvanized Steel Wire Rope	308
PCGS 16R(IS)	ISI Certified Retractable Blocks in Polymer Casing with Webbing Lanyard	309
PCGS 18	Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	315
PCGS 20	Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	315
PCGS 20R(N)	Retrieval Retractable Block	318
PCGS 25	Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	315
PCGS 25R	Retrieval Retractable Block	318
PCGS 27(IS)	ISI Certified Retractable Blocks in Polymer Casing with Galvanized Steel Wire Rope	308
PCGS 27R(IS)	ISI Certified Retractable Blocks in Polymer Casing with Webbing Lanyard	309
PCGS 30	Retractable Block in Polymer Casing with Galvanized Steel Wire Rope	315
PCGS 30R	Retrieval Retractable Block	318
PCSR 18	Kore-Blocks and Retrieval with Synthetic Textile Rope Retractable Lanyard	319
PCSR 18R	Kore-Blocks and Retrieval with Synthetic Textile Rope Retractable Lanyard	319
PCWB 02	Retractable Block in Polymer Casing with Webbing Lanyard	316
PCWB 02(IS)	ISI Certified Retractable Blocks in Polymer Casing with Webbing Lanyard	309
PCWB 02(SE)	Sharp Edge Tested Retractable Blocks in Polymer Casing with 25mm Wide Webbing Lanyard	317
PCWB 3.5(IS)	ISI Certified Retractable Blocks in Polymer Casing with Webbing Lanyard	309
PCWB 3.5N	Retractable Block in Polymer Casing with Webbing Lanyard	316
PCWB 3.5N(SE)	Sharp Edge Tested Retractable Blocks in Polymer Casing with 25mm Wide Webbing Lanyard	317
PCWB 05	Retractable Block in Polymer Casing with Webbing Lanyard	316
PCWB 05(SE)	Sharp Edge Tested Retractable Blocks in Polymer Casing with 25mm Wide Webbing Lanyard	317
PCWB 06	Retractable Block in Polymer Casing with Webbing Lanyard	316
PCWB 06(IS)	ISI Certified Retractable Blocks in Polymer Casing with Webbing Lanyard	309
PCWB 06(SE)	Sharp Edge Tested Retractable Blocks in Polymer Casing with 25mm Wide Webbing Lanyard	317
PCWB 7.5	Retractable Block in Polymer Casing with Webbing Lanyard	316
PCWB 10	Retractable Block in Polymer Casing with Webbing Lanyard	316
PCWB 10(IS)	ISI Certified Retractable Blocks in Polymer Casing with Webbing Lanyard	309
PCWB 12	Retractable Block in Polymer Casing with Webbing Lanyard	316
PN 01	Work Positioning Belt	230
PN 02	Work Positioning Belt	230
PN 03	Work Positioning Belt	230
PN 11	Rhino Harness	218
PN 12	Rhino Harness	218
PN 14	Full Body Harness for Controlled Descent (Class D)	225
PN 16	Full Body Harness for Basic Fall Arrest (Class A)	225
PN 17	Full Body Harness for Positioning (Class P)	225
PN 18	Full Body Harness for Tower Climbing (Class L)	226
PN 18(H)	Full Body Harness for Tower Climbing (Class L)	226
PN 19	Full Body Harness for Entry and Exit In Confined Space (Class E)	226
PN 20	Vest Harness	210
PN 20(RG)	Vest Harness (Reflective Green)	210
PN 20(RO)	Vest Harness (Reflective ORange)	210
PN 21	Rhino Harness	218
PN 22	Rhino Harness	218
PN 22(AS)	Nospark Harness	201
PN 22(DE)	Dienoc Dielectric Non-conductive Harness	208
PN 22(FR)	Flanil Flame Resistant Full Body Harness	204
PN 23	Rhino Harness	218
PN 24	Rhino Harness	218
PN 24(OR)	Revolta Climbers Harness	198
PN 25	Rhino Harness	218
PN 31(01)	Rhino Harness	218
PN 31(02)	Rhino Harness	218
PN 31(03)	Rhino Harness	218
PN 32(01)	Rhino Harness	218
PN 32(02)	Rhino Harness	218
PN 32(03)	Rhino Harness	218
PN 41(01)	Rhino Harness	218
PN 41(02)	Rhino Harness	218
PN 41(03)	Rhino Harness	218
PN 42(01)	Rhino Harness	218
PN 42(01)(DE)	Dienoc Dielectric Non-Conductive Harness with Work Positioning Belt	208
PN 42(02)	Rhino Harness	218
PN 42(02)(FR)	Flanil Flame Resistant Full Body Harness	204
PN 42(03)	Rhino Harness	218
PN 43(01)	Rhino Harness	218

Ref. No.	Products Name	Page No.
PN 43(02)	Rhino Harness	218
PN 43(03)	Rhino Harness	218
PN 44(01)	Rhino Harness	218
PN 44(02)	Rhino Harness	218
PN 44(03)	Rhino Harness	218
PN 44(OR)	Revolta Positioning Harness	198
PN 45(01)	Rhino Harness	218
PN 45(02)	Rhino Harness	218
PN 45(03)	Rhino Harness	218
PN 51	Rhino (Sit Harness)	219
PN 56	Rhino Harness	218
PN 56(OR)	Revolta All Purpose Harness	198
PN 57	Rhino Harness	218
PN 61	Rope Access and Rescue Harnesse	216
PN 61(R)	Rope Access and Rescue Harnesse	216
PN 62	Rope Access and Rescue Harnesse	216
PN 74	Elasto Harness	211
PN 94	Elasto Harness with Work Positioning Belt	211
PN 105	Aluminium Screw Locking Bulb Type Karabiner	237
PN 106	Aluminium Quarter Turn Locking Bulb Type Karabiner	237
PN 107	Aluminium Triple Action Locking Bulb Type Karabiner	237
PN 111	Steel Quarter Turn Locking Karabiner	242
PN 111(C)	Steel Quarter Turn Locking Karabiner (Captive Pin)	376
PN 111BE	Steel Quarter Turn Locking Bulb Type Karabiner	237
PN 111BESS	Stainless Steel Quarter Turn Locking Bulb Type Karabiner	237
PN 111SS	Stainless Steel Quarter Turn Locking Karabiner	242
PN 112	Steel Screw Locking Karabiner	242
PN 112(LI)	Steel Screw Locking Karabiner with Lock Indicator	242
PN 112B(LI)	Steel Screw Locking Bulb Type Karabiner with Lock Indicator	237
PN 112BE	Steel Screw Locking Bulb Type Karabiner	237
PN 113	Steel Quarter Turn Locking Karabiner	242
PN 113BE	Steel Quarter Turn Locking Bulb Type Karabiner	237
PN 113SS	Stainless Steel Quarter Turn Locking Karabiner	242
PN 114	Steel Triple Action Locking Karabiner	243
PN 114BE	Steel Triple Action Locking Bulb Type Karabiner	237
PN 115	Steel Quarter Turn Locking Karabiner	242
PN 115BE	Steel Quarter Turn Locking Bulb Type Karabiner	237
PN 115BE SS	Stainless Steel Quarter Trun Bulb Type Locking Karabiner	237
PN 115SS	Stainless Steel Quarter Turn Locking Karabiner	242
PN 115T	Steel Triple Action Locking Karabiner	243
PN 115TBE	Steel Triple Action Locking Bulb Type Karabiner	237
PN 115TBE SS	Stainless Steel Triple Action Locking Bulb Type Karabiner	238
PN 115TSS	Stainless Steel Triple Action Locking Karabiner	243
PN 116	Aluminum Screw Locking Karabiner	248
PN 116(LI)	Aluminium Screw Locking Karabiner with Lock Indicator	248
PN 116B(LI)	Aluminium Screw Locking Bulb Type Karabiner with Lock Indicator	238
PN 116BE	Aluminium Screw Locking Bulb Type Karabiner	237
PN 116F	Aluminium Screw Locking Karabiner	248
PN 116FBE	Aluminium Screw Locking Bulb Type Karabiner	237
PN 117	Aluminium Quarter Turn Locking Karabiner	248
PN 117BE	Aluminium Quarter Turn Locking Bulb Type Karabiner	237
PN 117F	Aluminium Quarter Turn Locking Karabiner	248
PN 117FBE	Aluminium Quarter Turn Locking Bulb Type Karabiner	237
PN 118	Aluminium Triple Action Locking Karabiner	248
PN 118BE	Aluminium Triple Action Locking Bulb Type Karabiner	237
PN 118F	Aluminium Triple Action Locking Karabiner	248
PN 118FBE	Aluminium Triple Action Locking Bulb Type Karabiner	237
PN 119T	Steel Triple Action Locking Karabiner	243
PN 119TBE	Steel Triple Action Locking Bulb Type Karabiner	237
PN 119TBESS	Stainless Steel Triple Action Locking Bulb Type Karabiner	238
PN 119TSS	Stainless Steel Triple Action Locking Karabiner	243
PN 121	Steel Snap Hook	245
PN 122	Steel Swivel Snap Hook	245
PN 123	Steel Swivel Snap Hook with Load Indicator	245
PN 124	Steel Snap Hook	245
PN 126	Aluminium Screw Locking Snap Hook	249
PN 127	Aluminium Quarter Turn Locking Snap Hook	249
PN 128	Aluminium Triple Action Locking Snap Hook	249
PN 129	Aluminium Snap Hook	249
PN 130	Aluminium Swivel Quarter Turn Locking Bulb Type Hook with Fall Indicator	239
PN 130P	Aluminium Swivel Quarter Turn Locking Bulb Type Hook without Indicator	239
PN 130T	Aluminium Swivel Triple Action Locking Bulb Type Hook with Fall Indicator	239
PN 131N	Steel Scaffold Hook	245
PN 132	Steel Tower Hook	245
PN 133	Steel Scaffold Hook	245
PN 134	Steel Tower Hook	245
PN 135	Steel Tower Hook	245
PN 136	Aluminium Scaffold Hook	249
PN 138	Aluminium Scaffold Hook	249

Ref. No.	Products Name	Page No.
PN 139	Aluminium Tower Hook	249
PN 141	Anchorage Hook	247
PN 142	Anchorage Hook	247
PN 143	Anchorage Hook	247
PN 150	Steel Pole Strap Snap Hook	246
PN 152	Steel Quarter Turn Locking Hook	246
PN 152T	Steel Triple Action Locking Hook	246
PN 154	Aluminium Anchorage Hook	249
PN 156	Steel Anchorage Hook	246
PN 158	Steel Standard Snap Hook	246
PN 160	Aluminium Quarter Turn Locking Bulb Type Hook	240
PN 160T	Aluminium Triple Action Locking Bulb Type Hook	240
PN 162	Steel Swivel Snap Hook with Load Indicator	245
PN 162SS	Stainless Steel Swivel Snap Hook with Load Indicator	246
PN 165	Steel Swivel Quarter Turn Locking Bulb Type Snap Hook with Load Indicator	240
PN 165T	Steel Swivel Triple Action Locking Bulb Type Snap Hook with Load Indicator	240
PN 166	Dielectric Scaffold Hook	250
PN 171	Steel Snap Hook	245
PN 172	Dielectric Snap Hook	250
PN 174	Twin SRL Connector	313
PN 177	Steel Triple Action Locking Scaffold Hook	246
PN 180	Aluminium Scaffold Hook	249
PN 181	Aluminium Scaffold Swivel Hook	249
PN 192BE	Aluminium Screw Locking Bulb Type Karabiner	237
PN 193BE	Aluminium Quarter Turn Locking Bulb Type Karabiner	237
PN 193TBE	Aluminium Triple Action Locking Bulb Type Karabiner	237
PN 194BE	Steel Screw Locking Bulb Type Karabiner	237
PN 195	Steel Quarter Turn Locking Karabiner	242
PN 195BE	Steel Quarter Turn Locking Bulb Type Karabiner	237
PN 195BESS	Stainless Steel Quarter Turn Locking Bulb Type Karabiner	237
PN 195SS	Stainless Steel Quarter Turn Locking Steel Karabiner	243
PN 195T	Steel Triple Action Locking Karabiner	243
PN 195TBE	Steel Triple Action Locking Bulb Type Karabiner	237
PN 195TBESS	Stainless Steel Triple Action Locking Bulb Type Karabiner	238
PN 195TSS	Stainless Steel Triple Action Locking Karabiner	243
PN 201	Restraint Twisted Rope Lanyard with Both Side Loop	255
PN 202	Restraint Twisted Rope Lanyard with one Side Loop and Other Side Karabiner PN 112	255
PN 203	Restraint Twisted Rope Lanyard with Both Side Karabiner PN 112	255
PN 204	Restraint Twisted Rope Lanyard with one Side Loop and Other Side Hook PN 121	255
PN 204(PP)	E-Con Restraint Lanyard	227
PN 204(PP)G	Ki Series Restraint Lanyard	229
PN 205	Restraint Twisted Rope Lanyard with Both Side Hook PN 121	255
PN 206(A)	Restraint Twisted Rope Lanyard with one Side Loop and Other Side Hook PN 136	255
PN 206(N)(PP)G	Ki Series Restraint Lanyard	229
PN 206N	Restraint Twisted Rope Lanyard with one Side Loop and Other Side Hook PN 131N	255
PN 206N(D)(PP)	E-Con Restraint Lanyard	227
PN 206N(D)(PP)G	Ki Series Restraint Lanyard	229
PN 206N(PP)	E-Con Restraint Lanyard	227
PN 207	Restraint Twisted Rope Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 121	255
PN 208(A)	Restraint Twisted Rope Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 136	255
PN 208N	Restraint Twisted Rope Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 131N	255
PN 209(A)	Restraint Twisted Rope Lanyard with one Side Hook PN 121 and Other Side Hook PN 136	255
PN 209N	Restraint Twisted Rope Lanyard with one Side Hook PN 121 and Other Side Hook PN 131N	255
PN 221	Restraint Webbing Lanyard (44 mm) with Both Side Loop	256
PN 222	Restraint Webbing Lanyard (44 mm) with one Side Loop and Other Side Karabiner PN 112	256
PN 223	Restraint Webbing Lanyard (44 mm) with Both Side Karabiner PN 112	256
PN 224	Restraint Webbing Lanyard (44 mm) with one Side Loop and Other Side Hook PN 121	256
PN 225	Restraint Webbing Lanyard (44 mm) with Both Side Hook PN 121	256
PN 226(A)	Restraint Webbing Lanyard (44 mm) with one Side Loop and Other Side Hook PN 136	256
PN 226N	Restraint Webbing Lanyard (44 mm) with one Side Loop and Other Side Hook PN 131N	256
PN 227	Restraint Webbing Lanyard (44 mm) with one Side Karabiner PN 112 and Other Side Hook PN 121	256
PN 228(A)	Restraint Webbing Lanyard (44 mm) with one Side Karabiner PN 112 and Other Side Hook PN 136	256
PN 228N	Restraint Webbing Lanyard (44 mm) with one Side Karabiner PN 112 and Other Side Hook PN 131N	256
PN 229(A)	Restraint Webbing Lanyard (44 mm) with one Side Hook PN 121 and Other Side Hook PN 136	256
PN 229N	Restraint Webbing Lanyard (44 mm) with one Side Hook PN 121 and Other Side Hook PN 131N	256
PN 231(A)	Restraint forked Lanyard	260
PN 231N	Restraint forked Lanyard	260
PN 241	Work Positioning Lanyard with Ring Type Adjuster	253
PN 242	Work Positioning Lanyard with Grip Adjuster	253
PN 243	Webbing Work Positioning Lanyard	253
PN 243(FR)	Flanil Flame Resistant Work Positioning Lanyard with Ring Type Adjuster	205
PN 244	Work Positioning Lanyard with Ring Adjuster	253
PN 245	Work Positioning Lanyard with Grip Adjuster	253
PN 246	Work Positioning Lanyard with Grip Adjuster	253
PN 247	Work Positioning Lanyard with Grip Adjuster	253
PN 248(OR)	Revolta Pole Strap	199
PN 249	Work Positioning Lanyard with Grip Adjuster	253
PN 249(F)	Work Positioning Lanyard with Grip Adjuster with Fixed Rope Grab	253
PN 251(A)	Restraint forked Lanyard	260
PN 251N	Restraint forked Lanyard	260
PN 261(A)	Restraint forked Lanyard	260
PN 261(FR)	Flanil Flame Resistant Restraint forked Lanyard	205
PN 261N	Restraint forked Lanyard	260
PN 281	Restraint Kernmantle Rope Lanyard with Both Side Loop	257
PN 281(AD)	Restraint Kernmantle Rope Adjustable Lanyard with Both Side Loop	258
PN 282	Restraint Kernmantle Rope Lanyard with one Side Loop and Other Side Karabiner PN 112	257
PN 282(AD)	Restraint Kernmantle Rope Adjustable Lanyard with one Side Loop and Other Side Karabiner PN 112	258
PN 283	Restraint Kernmantle Rope Lanyard with Both Side Karabiner PN 112	257
PN 283(AD)	Restraint Kernmantle Rope Adjustable Lanyard with Both Side Karabiner PN 112	258
PN 284	Restraint Kernmantle Rope Lanyard with one Side Loop and Other Side Hook PN 121	257
PN 284(AD)	Restraint Kernmantle Rope Adjustable Lanyard with one Side Loop and Other Side Hook PN 121	258
PN 285	Restraint Kernmantle Rope Lanyard with Both Side Hook PN 121	257
PN 285(AD)	Restraint Kernmantle Rope Adjustable Lanyard with Both Side Hook PN 121	258
PN 286(A)	Restraint Kernmantle Rope Lanyard with one Side Loop and Other Side Hook PN 136	257
PN 286(A)(AD)	Restraint Kernmantle Rope Adjustable Lanyard with one Side Loop and Other Side Hook PN 136	258
PN 286N	Restraint Kernmantle Rope Lanyard with one Side Loop and Other Side Hook PN 131N	257
PN 286N(AD)	Restraint Kernmantle Rope Adjustable Lanyard with one Side Loop and Other Side Hook PN 131N	258
PN 287	Restraint Kernmantle Rope Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 121	257
PN 287(AD)	Restraint Kernmantle Rope Adjustable Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 121	258
PN 288(A)	Restraint Kernmantle Rope Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 136	257
PN 288(A)(AD)	Restraint Kernmantle Rope Adjustable Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 136	258
PN 288N	Restraint Kernmantle Rope Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 131N	257
PN 288N(AD)	Restraint Kernmantle Rope Adjustable Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 131N	258
PN 289(A)	Restraint Kernmantle Rope Lanyard with one Side Hook PN 121 and Other Side Hook PN 136	257
PN 289(A)(AD)	Restraint Kernmantle Rope Adjustable Lanyard with one Side Hook PN 121 and Other Side Hook PN 136	258
PN 289N	Restraint Kernmantle Rope Lanyard with one Side Hook PN 121 and Other Side Hook PN 131N	257
PN 289N(AD)	Restraint Kernmantle Rope Adjustable Lanyard with one Side Hook PN 121 and Other Side Hook PN 131N	258
PN 291	Restraint Expandable Lanyard with Both Side Loop	259
PN 292	Restraint Expandable Lanyard with one Side Loop and Other Side Karabiner PN 112	259
PN 293	Restraint Expandable Lanyard with Both Side Karabiner PN 112	259
PN 294	Restraint Expandable Lanyard with one Side Loop and Other Side Hook PN 121	259
PN 295	Restraint Expandable Lanyard with Both Side Hook PN 121	259
PN 296(A)	Restraint Expandable Lanyard with one Side Loop and Other Side Hook PN 136	259
PN 296N	Restraint Expandable Lanyard with one Side Loop and Other Side Hook PN 131N	259
PN 297	Restraint Expandable Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 121	259
PN 298(A)	Restraint Expandable Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 136	259
PN 298N	Restraint Expandable Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 131N	259
PN 299(A)	Restraint Expandable Lanyard with one Side Hook PN 121 and Other Side Hook PN 136	259
PN 299N	Restraint Expandable Lanyard with one Side Hook PN 121 and Other Side Hook PN 131N	259

Ref. No.	Products Name	Page No.
PN 2000A	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2000B	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2000C	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2001(04)	Intermediate	373
PN 2001(04)	Intermediate	373
PN 2002(SW)	Mini Block (Swivel)	321
PN 2003	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2004	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2005	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2005(AP)	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2006	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2006(11)	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2007	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2007(AP)	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2008	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2008(AP)	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2009	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2009(F)	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2009(SA)	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2010	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 2010(AP)	Guided Type Fall Arrester System on Flexible Anchorage Line	293
PN 300	Energy Absorber	261
PN 301	Energy Absorbing Twisted Rope Lanyard Both Side Loop	262
PN 301(S)	Small Energy Absorbing Twisted Rope Lanyard Both Side Loop	262
PN 302	Energy Absorbing Twisted Rope Lanyard one Side Loop and Other Side Karabiner PN 112	262
PN 302(S)	Small Energy Absorbing Twisted Rope Lanyard one Side Loop and Other Side Karabiner PN 112	262
PN 303	Energy Absorbing Twisted Rope Lanyard Both Side Karabiner PN 112	262
PN 303(S)	Small Energy Absorbing Twisted Rope Lanyard Both Side Karabiner PN 112	262
PN 304	Energy Absorbing Twisted Rope Lanyard one Side Loop and Other Side Hook PN 121	262
PN 304(S)	Small Energy Absorbing Twisted Rope Lanyard one Side Loop and Other Side Hook PN 121	262
PN 305	Energy Absorbing Twisted Rope Lanyard Both Side Hook PN 121	262
PN 306(A)	Energy Absorbing Twisted Rope Lanyard one Side Loop and Other Side Hook PN 136	262
PN 306(S)(A)	Small Energy Absorbing Twisted Rope Lanyard one Side Loop and Other Side Hook PN 136	262
PN 306(S)N	Small Energy Absorbing Twisted Rope Lanyard one Side Loop and Other Side Hook PN 131N	262
PN 306N	Energy Absorbing Twisted Rope Lanyard one Side Loop and Other Side Hook PN 131N	262
PN 307	Energy Absorbing Twisted Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 121	262
PN 307(S)	Small Energy Absorbing Twisted Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 121	262
PN 308(A)	Energy Absorbing Twisted Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 136	262
PN 308(S)(A)	Small Energy Absorbing Twisted Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 136	262
PN 308(S)N	Small Energy Absorbing Twisted Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 131N	262
PN 308N	Energy Absorbing Twisted Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 131N	262
PN 309(A)	Energy Absorbing Twisted Rope Lanyard one Side Hook PN 121 and Other Side Hook PN 136	262
PN 309N	Energy Absorbing Twisted Rope Lanyard one Side Hook PN 121 and Other Side Hook PN 131N	262
PN 310	Energy Absorbing Twisted Rope Lanyard one Side Loop and Other Side Karabiner PN 141	262
PN 310(S)	Small Energy Absorbing Twisted Rope Lanyard one Side Loop and Other Side Karabiner PN 141	262
PN 311	Energy Absorbing Twisted Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 141	262
PN 311(S)	Small Energy Absorbing Twisted Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 141	262
PN 312	Energy Absorbing Twisted Rope Lanyard one Side Hook PN 121 and Other Side Hook PN 141	262
PN 321	Energy Absorbing 44 mm Webbing Lanyard Both Side Loop	263
PN 321(S)	Small Energy Absorbing 44 mm Webbing Lanyard Both Side Loop	263
PN 322	Energy Absorbing 44 mm Webbing Lanyard one Side Loop and Other Side Karabiner PN 112	263
PN 322(S)	Small Energy Absorbing 44 mm Webbing Lanyard one Side Loop and Other Side Karabiner PN 112	263
PN 323	Energy Absorbing 44 mm Webbing Lanyard Both Side Karabiner PN 112	263
PN 323(S)	Small Energy Absorbing 44 mm Webbing Lanyard Both Side Karabiner PN 112	263
PN 324	Energy Absorbing 44 mm Webbing Lanyard one Side Loop and Other Side Hook PN 121	263
PN 324(S)	Small Energy Absorbing 44 mm Webbing Lanyard one Side Loop and Other Side Hook PN 121	263
PN 325	Energy Absorbing 44 mm Webbing Lanyard Both Side Hook 121	263
PN 326(30)(DE)	Dienoc E.A. Lanyard	209
PN 326(A)	Energy Absorbing 44 mm Webbing Lanyard one Side Loop and Other Side Hook PN 136	263
PN 326(S)(A)	Small Energy Absorbing 44 mm Webbing Lanyard one Side Loop and Other Side Hook PN 136	263
PN 326(S)N	Small Energy Absorbing 44 mm Webbing Lanyard one Side Loop and Other Side Hook PN 131N	263
PN 326N	Energy Absorbing 44 mm Webbing Lanyard one Side Loop and Other Side Hook PN 131N	263
PN 327	Energy Absorbing 44 mm Webbing Lanyard one Side Karabiner PN 112 and Other Side Hook PN 121	263
PN 327(S)	Small Energy Absorbing 44 mm Webbing Lanyard one Side Karabiner PN 112 and Other Side Hook PN 121	263
PN 328(A)	Energy Absorbing 44 mm Webbing Lanyard one Side Karabiner PN 112 and Other Side Hook PN 136	263
PN 328(AS)	Nospark Antistatic E.A. Lanyard	202
PN 328(FR)	Flanil Flame Resistant E.A. Fall Arrest Lanyard	205
PN 328(S)(A)	Small Energy Absorbing 44 mm Webbing Lanyard one Side Karabiner PN 112 and Other Side Hook PN 136	263
PN 328(S)N	Small Energy Absorbing 44 mm Webbing Lanyard one Side Karabiner PN 112 and Other Side Hook PN 131N	263
PN 328N	Energy Absorbing 44 mm Webbing Lanyard one Side Karabiner PN 112 and Other Side Hook PN 131N	263
PN 329(30)(DE)	Dienoc E.A. Lanyard	209
PN 329(A)	Energy Absorbing 44 mm Webbing Lanyard one Side Hook PN 121 and Other Side Hook PN 136	263
PN 329N	Energy Absorbing 44 mm Webbing Lanyard one Side Hook PN 121 and Other Side Hook PN 131N	263
PN 330	Energy Absorbing 44 mm Webbing Lanyard one Side Loop and Other Side Karabiner PN 141	263
PN 330(S)	Small Energy Absorbing 44 mm Webbing Lanyard one Side Loop and Other Side Karabiner PN 141	263
PN 331	Energy Absorbing 44 mm Webbing Lanyard one Side Karabiner PN 112 and Other Side Hook PN 141	263
PN 331(S)	Small Energy Absorbing 44 mm Webbing Lanyard one Side Karabiner PN 112 and Other Side Hook PN 141	263
PN 332	Energy Absorbing 44 mm Webbing Lanyard one Side Hook PN 121 and Other Side Hook PN 141	263
PN 341(A)	forked Lanyard with Energy Absorber	270
PN 341(A)(AD)	Adjustable forked Lanyard with Energy Absorber	270
PN 341(A)(SE)	Sharp Edge Tested forked Lanyard	272
PN 341N	forked Lanyard with Energy Absorber	270
PN 341N(AD)	Adjustable forked Lanyard with Energy Absorber	270
PN 341N(SE)	Sharp Edge Tested forked Lanyard	272
PN 351(A)	forked Lanyard with Energy Absorber	270
PN 351N	forked Lanyard with Energy Absorber	270
PN 352	forked Lanyard with Energy Absorber	270
PN 360(30)(DE)	Dienoc E.A. forked Lanyard	209
PN 361(30)(AS)	Nospark Antistatic E.A. forked Lanyard	202
PN 361(30)(DE)	Dienoc E.A. forked Lanyard	209
PN 361(A)	forked Lanyard with Energy Absorber	270
PN 361(AS)	Nospark Antistatic E.A. forked Lanyard	202
PN 361(FR)	Flanil Flame Resistant E.A. Fall Arrest forked Lanyard	205
PN 361N	forked Lanyard with Energy Absorber	270
PN 371(A)	forked Lanyard with Energy Absorber	270
PN 371(A)(IS)	140 Kg Tested Expandable Internal Shock Absorbing Twin Lanyard	273
PN 371(A)(SE)140	Sharp Edge Tested forked Lanyard	272
PN 371(AS)	Nospark Antistatic Expandable E.A. Webbing forked Lanyard	202
PN 371(FR)	Flanil Flame Resistant E.A. forked Expandable Fall Arrest Lanyard	205
PN 371(IS)(A)(OR)	Revolta Expandable Internal Shock Absorbing forked Lanyard	199
PN 371N	forked Lanyard with Energy Absorber	270
PN 371N(IS)	140 Kg Tested Expandable Internal Shock Absorbing Twin Lanyard	273
PN 371N(SE)140	Sharp Edge Tested forked Lanyard	272
PN 381	Energy Absorbing Kernmantle Rope Lanyard Both Side Loop	264
PN 381(AD)	Energy Absorbing Kernmantle Rope Adjustable Lanyard with Both Side Loop	265
PN 381(S)	Small Energy Absorbing Kernmantle Rope Lanyard Both Side Loop	264
PN 381(S)(AD)	Small Energy Absorbing Kernmantle Rope Adjustable Lanyard with Both Side Loop	265
PN 381(S)(SE)	Small Energy Absorbing Kernmantle Edge Safe Lanyard Both Side Loop	266
PN 381(SE)	Energy Absorbing Kernmantle Edge Safe Lanyard Both Side Loop	266
PN 382	Energy Absorbing Kernmantle Rope Lanyard one Side Loop and Other Side Karabiner PN 112	264
PN 382(AD)	Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Loop and Other Side Karabiner PN 112	265
PN 382(S)	Small Energy Absorbing Kernmantle Rope Lanyard one Side Loop and Other Side Karabiner PN 112	264
PN 382(S)(AD)	Small Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Loop and Other Side Karabiner PN 112	265
PN 382(S)(SE)	Small Energy Absorbing Kernmantle Edge Safe Lanyard one Side Loop and Other Side Karabiner PN 112	266
PN 382(SE)	Energy Absorbing Kernmantle Edge Safe Lanyard one Side Loop and Other Side Karabiner PN 112	266
PN 383	Energy Absorbing Kernmantle Rope Lanyard Both Side Karabiner PN 112	264
PN 383(AD)	Energy Absorbing Kernmantle Rope Adjustable Lanyard with Both Side Karabiner PN 112	265

Ref. No.	Products Name	Page No.
PN 383(S)	Small Energy Absorbing Kernmantle Rope Lanyard Both Side Karabiner PN 112	264
PN 383(S)(AD)	Small Energy Absorbing Kernmantle Rope Adjustable Lanyard with Both Side Karabiner PN 112	265
PN 383(S)(SE)	Small Energy Absorbing Kernmantle Edge Safe Lanyard Both Side Karabiner PN 112	266
PN 383(SE)	Energy Absorbing Kernmantle Edge Safe Lanyard Both Side Karabiner PN 112	266
PN 384	Energy Absorbing Kernmantle Rope Lanyard one Side Loop and Other Side Hook PN 121	264
PN 384(AD)	Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Loop and Other Side Hook PN 121	265
PN 384(S)	Small Energy Absorbing Kernmantle Rope Lanyard one Side Loop and Other Side Hook PN 121	264
PN 384(S)(AD)	Small Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Loop and Other Side Hook PN 121	265
PN 384(S)(SE)	Small Energy Absorbing Kernmantle Edge Safe Lanyard one Side Loop and Other Side Hook PN 121	266
PN 384(SE)	Energy Absorbing Kernmantle Edge Safe Lanyard one Side Loop and Other Side Hook PN 121	266
PN 385	Energy Absorbing Kernmantle Rope Lanyard Both Side Hook 121	264
PN 385(AD)	Energy Absorbing Kernmantle Rope Adjustable Lanyard with Both Side Hook PN 121	265
PN 385(SE)	Energy Absorbing Kernmantle Edge Safe Lanyard Both Side Hook 121	266
PN 386(A)	Energy Absorbing Kernmantle Rope Lanyard one Side Loop and Other Side Hook PN 136	264
PN 386(A)(AD)	Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Loop and Other Side Hook PN 136	265
PN 386(A)(S)(SE)	Small Energy Absorbing Kernmantle Edge Safe Lanyard one Side Loop and Other Side Hook PN 131N	266
PN 386(A)(SE)	Energy Absorbing Kernmantle Edge Safe Lanyard one Side Loop and Other Side Hook PN 131N	266
PN 386(S)(A)	Small Energy Absorbing Kernmantle Rope Lanyard one Side Loop and Other Side Hook PN 136	264
PN 386(S)(A)(AD)	Small Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 136	265
PN 386(S)N	Small Energy Absorbing Kernmantle Rope Lanyard one Side Loop and Other Side Hook PN 131N	264
PN 386(S)N(AD)	Small Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Loop and Other Side Hook PN 131N	265
PN 386N	Energy Absorbing Kernmantle Rope Lanyard one Side Loop and Other Side Hook PN 131N	264
PN 386N(AD)	Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Loop and Other Side Hook PN 131N	265
PN 386N(S)(SE)	Small Energy Absorbing Kernmantle Edge Safe Lanyard one Side Loop and Other Side Hook PN 136	266
PN 386N(SE)	Energy Absorbing Kernmantle Edge Safe Lanyard one Side Loop and Other Side Hook PN 136	266
PN 387	Energy Absorbing Kernmantle Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 121	264
PN 387(AD)	Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 121	265
PN 387(S)	Small Energy Absorbing Kernmantle Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 121	264
PN 387(S)(AD)	Small Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 121	265
PN 387(S)(SE)	Small Energy Absorbing Kernmantle Edge Safe Lanyard one Side Karabiner PN 112 and Other Side Hook PN 121	266
PN 387(SE)	Energy Absorbing Kernmantle Edge Safe Lanyard one Side Karabiner PN 112 and Other Side Hook PN 121	266
PN 388(A)	Energy Absorbing Kernmantle Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 136	264
PN 388(A)(AD)	Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 136	265
PN 388(A)(S)(SE)	Small Energy Absorbing Kernmantle Edge Safe Lanyard one Side Hook PN 121 and Other Side Hook PN 131N	266
PN 388(A)(SE)	Energy Absorbing Kernmantle Edge Safe Lanyard one Side Karabiner PN 112 and Other Side Hook PN 131N	266
PN 388(S)(A)	Small Energy Absorbing Kernmantle Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 136	264
PN 388(S)(A)(AD)	Small Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 136	265
PN 388(S)N	Small Energy Absorbing Kernmantle Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 131N	264
PN 388(S)N(AD)	Small Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Hook PN 121 and Other Side Hook PN 131N	265
PN 388N	Energy Absorbing Kernmantle Rope Lanyard one Side Karabiner PN 112 and Other Side Hook PN 131N	264
PN 388N(AD)	Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 131N	265
PN 388N(S)(SE)	Small Energy Absorbing Kernmantle Edge Safe Lanyard one Side Karabiner PN 112 and Other Side Hook PN 136	266
PN 388N(SE)	Energy Absorbing Kernmantle Edge Safe Lanyard one Side Hook PN 121 and Other Side Hook PN 136	266
PN 389(A)	Energy Absorbing Kernmantle Rope Lanyard one Side Hook PN 121 and Other Side Hook PN 136	264
PN 389(A)(SE)	Energy Absorbing Kernmantle Edge Safe Lanyard one Side Hook PN 121 and Other Side Hook PN 136	266
PN 389(SE)N	Energy Absorbing Kernmantle Edge Safe Lanyard one Side Hook PN 121 and Other Side Hook PN 131N	266
PN 389N	Energy Absorbing Kernmantle Rope Lanyard one Side Hook PN 121 and Other Side Hook PN 131N	264
PN 389N(AD)	Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Hook PN 121 and Other Side Hook PN 131N	265
PN 389(A)(AD)	Energy Absorbing Kernmantle Rope Adjustable Lanyard with one Side Hook PN 121 and Other Side Hook PN 136	265
PN 391	Energy Absorbing Expandable Webbing Lanyard with Both Side Loop	267
PN 391(140)	140 Kg Tested Energy Absorbing Expandable Webbing Lanyard with Both Side Loop	267
PN 391(IS)	Internal Shock Absorbing Expandable Lanyard Both Side Loop	269
PN 391(S)	Small Energy Absorbing Expandable Webbing Lanyard with Both Side Loop	267
PN 391(SE)	Energy Absorbing Expandable Webbing Edge Safe Lanyard with Both Side Loop	268
PN 391(SE)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Edge Safe Lanyard with Both Side Loop	268
PN 392	Energy Absorbing Expandable Webbing Lanyard with one Side Loop and Other Side Karabiner PN 112	267
PN 392(140)	140 Kg Tested Energy Absorbing Expandable Webbing Lanyard with one Side Loop and Other Side Karabiner PN 112	267
PN 392(IS)	Internal Shock Absorbing Expandable Lanyard one Side Loop and Other Side Karabiner PN 112	269
PN 392(S)	Small Energy Absorbing Expandable Webbing Lanyard with one Side Loop and Other Side Karabiner PN 112	267
PN 392(SE)	Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Loop and Other Side Karabiner PN 112	268
PN 392(SE)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Loop and Other Side Karabiner PN 112	268
PN 393	Energy Absorbing Expandable Webbing Lanyard with Both Side Karabiner PN 112	267
PN 393(140)	140 Kg Tested Energy Absorbing Expandable Webbing Lanyard with Both Side Karabiner PN 112	267
PN 393(IS)	Internal Shock Absorbing Expandable Lanyard Both Side Karabiner PN 112	269
PN 393(S)	Small Energy Absorbing Expandable Webbing Lanyard with Both Side Karabiner PN 112	267
PN 393(SE)	Energy Absorbing Expandable Webbing Edge Safe Lanyard with Both Side Karabiner PN 112	268
PN 393(SE)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Edge Safe Lanyard with Both Side Karabiner PN 112	268
PN 394	Energy Absorbing Expandable Webbing Lanyard with one Side Loop and Other Side Hook PN 121	267
PN 394(140)	140 Kg Tested Energy Absorbing Expandable Webbing Lanyard with one Side Loop and Other Side Hook PN 121	267
PN 394(IS)	Internal Shock Absorbing Expandable Lanyard one Side Loop and Other Side Hook PN 121	269
PN 394(S)	Small Energy Absorbing Expandable Webbing Lanyard with one Side Loop and Other Side Hook PN 121	267
PN 394(SE)	Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Loop and Other Side Hook PN 121	268
PN 394(SE)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Loop and Other Side Hook PN 121	268
PN 395	Energy Absorbing Expandable Webbing Lanyard with Both Side Hook PN 121	267
PN 395(140)	140 Kg Tested Energy Absorbing Expandable Webbing Lanyard with Both Side Hook PN 121	267
PN 395(IS)	Internal Shock Absorbing Expandable Lanyard Both Side Hook 121	269
PN 395(S)	Small Energy Absorbing Expandable Webbing Lanyard with Both Side Hook PN 121	267
PN 395(SE)	Energy Absorbing Expandable Webbing Edge Safe Lanyard with Both Side Hook PN 121	268
PN 395(SE)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Edge Safe Lanyard with Both Side Hook PN 121	268
PN 396(A)	Energy Absorbing Expandable Webbing Lanyard with one Side Loop and Other Side Hook PN 136	267
PN 396(A)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Lanyard with one Side Loop and Other Side Hook PN 136	267
PN 396(A)(IS)	Internal Shock Absorbing Expandable Lanyard one Side Loop and Other Side Hook PN 136	269
PN 396(A)(S)	Small Energy Absorbing Expandable Webbing Lanyard with one Side Loop and Other Side Hook PN 136	267
PN 396(A)(SE)	Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Loop and Other Side Hook PN 136	268
PN 396(A)(SE)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Loop and Other Side Hook PN 136	268
PN 396N	Energy Absorbing Expandable Webbing Lanyard with one Side Loop and Other Side Hook PN 131N	267
PN 396N(140)	140 Kg Tested Energy Absorbing Expandable Webbing Lanyard with one Side Loop and Other Side Hook PN 131N	267
PN 396N(IS)	Internal Shock Absorbing Expandable Lanyard one Side Loop and Other Side Hook PN 131N	269
PN 396N(S)	Small Energy Absorbing Expandable Webbing Lanyard with one Side Loop and Other Side Hook PN 131N	267
PN 396N(SE)	Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Loop and Other Side Hook PN 131N	268

Ref. No.	Products Name	Page No.
PN 396N(SE)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Loop and Other Side Hook PN 131N	268
PN 397	Energy Absorbing Expandable Webbing Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 121	267
PN 397(140)	140 Kg Tested Energy Absorbing Expandable Webbing Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 121	267
PN 397(IS)	Internal Shock Absorbing Expandable Lanyard one Side Karabiner PN 112 and Other Side Hook PN 121	269
PN 397(S)	Small Energy Absorbing Expandable Webbing Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 121	267
PN 397(SE)	Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 121	268
PN 397(SE)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 121	268
PN 398(A)	Energy Absorbing Expandable Webbing Lanyard with one Side Hook PN 121 and Other Side Hook PN 136	267
PN 398(A)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Lanyard with one Side Hook PN 121 and Other Side Hook PN 136	267
PN 398(A)(IS)	Internal Shock Absorbing Expandable Lanyard one Side Karabiner PN 112 and Other Side Hook PN 136	269
PN 398(A)(S)	Energy Absorbing Expandable Webbing Lanyard with one Side Hook PN 121 and Other Side Hook PN 136	267
PN 398(A)(SE)	Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 136	268
PN 398(A)(SE)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 136	268
PN 398N	Energy Absorbing Expandable Webbing Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 131N	267
PN 398N(140)	140 Kg Tested Energy Absorbing Expandable Webbing Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 131N	267
PN 398N(IS)	Internal Shock Absorbing Expandable Lanyard one Side Karabiner PN 112 and Other Side Hook PN 131N	269
PN 398N(S)	Energy Absorbing Expandable Webbing Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 131N	267
PN 398N(SE)	Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 131N	268
PN 398N(SE)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 131N	268
PN 399(A)	Energy Absorbing Expandable Webbing Lanyard with one Side Hook PN 121 and Other Side Hook PN 136	267
PN 399(A)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Lanyard with one Side Hook PN 121 and Other Side Hook PN 136	267
PN 399(A)(IS)	Internal Shock Absorbing Expandable Lanyard one Side Hook PN 121 and Other Side Hook PN 136	269
PN 399(A)(SE)	Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Hook PN 121 and Other Side Hook PN 136	268
PN 399(A)(SE)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Hook PN 121 and Other Side Hook PN 136	268
PN 399(IS)(A)(OR)	Revolta Expandable Internal Shock Absorbing Lanyard	199
PN 399N	Energy Absorbing Expandable Webbing Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 131N	267
PN 399N(140)	140 Kg Tested Energy Absorbing Expandable Webbing Lanyard with one Side Karabiner PN 112 and Other Side Hook PN 131N	267
PN 399N(IS)	Internal Shock Absorbing Expandable Lanyard one Side Hook PN 121 and Other Side Hook PN 131N	269
PN 399N(SE)	Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Hook PN 121 and Other Side Hook PN 131N	268
PN 399N(SE)(140)	140 Kg Tested Energy Absorbing Expandable Webbing Edge Safe Lanyard with one Side Hook PN 121 and Other Side Hook PN 131N	268
PN 3000(BC)	Horizon Temporary Horizontal Webbing Anchorage Line	301
PN 3000(BC)	Horizon Temporary Horizontal Webbing Anchorage Line	301
PN 3001	Horizon 4 Man Temporary Horizontal Rope Anchorage Line	302
PN 3001(C)	Horizon 4 Man Temporary Horizontal Rope Anchorage Line	302
PN 3002	Horizon 2 Man Temporary Horizontal Rope Anchorage Line	303
PN 3002(C)	Horizon 2 Man Temporary Horizontal Rope Anchorage Line	303
PN 400	Small Energy Absorber	261
PN 401	Grip Descender	347
PN 401(W)(25)	Webbing Cow's Tail	348
PN 402(A)	Adjustable Webbing Foot Loop	348
PN 402(L)	Rope Clamp	348
PN 402(R)	Rope Clamp	348
PN 403	Karam Respac Recovery Stretcher	356
PN 405	Rope Clamp	348
PN 408N	EVAC-R	357
PN 410	Descender - Jumper	347
PN 411	Ratchet Hauling System	354
PN 431	Figure of 8	347
PN 4000 LS (Floor/Ceiling Mounted)	Horizontal Anchorage Lifeline System On Cable Line	378
PN 4000 (Floor/Ceiling Mounted)	Horizontal Anchorage Lifeline System On Cable Line	378
PN 4000 (Roof Mounted)	Horizontal Anchorage Lifeline System On Cable Line	378
PN 4000 LS(02)	Shock Absorber	374
PN 4000(03)	Swaged Tensioner	378
PN 4000(03)N	Swaged Tensioner	378
PN 4000(03)N	Swaged Tensioner	378

Ref. No.	Products Name	Page No.
PN 4000(03)SL	Swageless tensioner	378
PN 4000(03)SL	Swageless tensioner	378
PN 4000(03)SL	Swageless tensioner	378
PN 4000(08)	Carriage Body	378
PN 4000(09)	Universal Extremity Plate	379
PN 4000(09)	Universal Extremity Plate	379
PN 4000(10)	Intermediate	373
PN 4000(10)	Intermediate	373
PN 4000(10)	Intermediate	380
PN 4000(10)N	Optional: Intermediate	378
PN 4000(15)	Swaged Cable Extremity	375
PN 4000(15)	Swaged Cable Extremity	375
PN 4000(15)	Swaged Cable Extremity	375
PN 4000(15)	Swaged Cable Extremity	375
PN 4000(17)	Wheel Type Carriage Body	379
PN 4000(17)	Wheel Type Carriage Body	379
PN 4000(21)M 120°	Corner Piece for Floor/Ceiling	383
PN 4000(21)M 90°	Corner Piece for Floor/Ceiling	383
PN 4000(39)	Round Clamp Mounting Bracket for Lifeline	382
PN 4000(40)	Carriage Body	378
PN 4000(40)	Carriage Body	378
PN 4000MU(02	Shock Absorber	374
PN 4000MU(02)	Shock Absorber	374
PN 4000MU(02.5)(D)	D-shakle	373
PN 4001N	Handy Line Temporary Horizontal Lifeline	304
PN 4002R(09)	Anchor Clavis	292
PN 501	Shelmet	43
PN 541	Shelblast	43
PN 542(YTC)	Shelblast	43
PN 546	Shelblast	43
PN 546(YTC)	Shelblast	43
PN 561(T)	Sheltek	45
PN 571	Sheltor	46
PN 574	Sheltor	46
PN 581	Sheltek	45
PN 595	Bump Cap	49
PN 5000	Horizontal Anchorage Lifeline System On Cable Line	378
PN 5000(01)	Aluminium Rail Intermediate	376
PN 5000(01)	Aluminium Rail Intermediate	376
PN 5000(02)	Aluminium Rail Extremity	376
PN 5000(02)	Aluminium Rail Extremity	376
PN 5000(03)	Stainless Steel Mounting Nut	377
PN 5000(03)	Stainless Steel Mounting Nut	381
PN 5000(04)	Wall Mounting Bracket Flush Type	381
PN 5000(05)	Wall Mounting Bracket with Recess	381
PN 5000(06	Stainless Steel Ceiling Mounting Bracket	377
PN 5000(06)	Ceiling Mounting Bracket	381
PN 5000(08)	Junction	376
PN 5000(08)	Junction	376
PN 5000(08)	Junction	376
PN 5000(09A)	Curved Aluminium Rail Material: Extruded Aluminium Alloy - Outer wall mounted	381
PN 5000(09B)	Curved Aluminium Rail Material: Extruded Aluminium Alloy - Inner wall mounted	381
PN 5000(10)	Curved Aluminium Rail Material: Extruded Aluminium Alloy - Ceiling / Floors	381
PN 5000(12)	Trolley for Wall	381
PN 5000(13)	Trolley for Ceiling/Floor	381
PN 629AC	Aironic Activcooling Helmet - Internal Battery	48
PN 630AC	Aironic Activcooling Helmet -External Battery	48
PN 651	Maintenance and Window Cleaning Kit	360
PN 652	Basic Rescue Kit (Rope Access)	360
PN 653	Telecom Tower Climbing Kit	361
PN 654	Confined Space Entry/Egress Kit with Tripod	361
PN 655	Confined Space Entry/Egress Kit with K-Pod	362
PN 660	Material Hauling System	366
PN 660(3:1)	Material Hauling System	366
PN 660(5:1)	Material Hauling System	366
PN 661	Hauling and Lowering Rescue Kit	362
PN 666	Fall Arrest Rescue with Ratchet Hauling System Kit	363
PN 667	Painter Kit (Essential)	364
PN 667(P)	Painter Kit (Premium)	364
PN 670	Quick Zip Line System Kit	365
PN 6000	Vertical Anchorage Line System on Rigid Cable Line	373
PN 6000(01)	Set of 2-U Bolts and 1 Thimble	373
PN 6000(01)	Set of 2-U Bolts and 1 Thimble	373
PN 7000	Vertical Anchorage Line System on Rigid Cable Line	373
PN 7000(01)	Mounting Bracket	373
PN 7000(01)	Mounting Bracket	373
PN 7000(01)	Mounting Bracket	373

Ref. No.	Products Name	Page No.
PN 7000(01)S	Mounting Bracket	373
PN 7000(01)S	Mounting Bracket	373
PN 7000(02)	Shock Absorber	374
PN 7000(03)	Cable Extremity (swageless)	378
PN 7000(03)	Cable Extremity (swageless)	378
PN 7000(03)	Cable Extremity (swageless)	378
PN 7000(05)	Tensioner	373
PN 7000(05)	Tensioner	373
PN 7000(05)	Tensioner	375
PN 7000(06)	Extension Arm	373
PN 7000(06)	Extension Arm	373
PN 7000(12)	Set of 2-U Bolts, 1 wire rope cap and 1 Thimble	375
PN 7000(13)	Optional: Mounting Bracket	373
PN 7000(13)	Optional: Mounting Bracket	373
PN 7000(13)EC	Optional: Mounting Bracket	373
PN 7000(13)EC	Optional: Mounting Bracket	373
PN 7000(14)	Wire crimping assembly	373
PN 7000(14)	Wire crimping assembly	373
PN 7000(21)L(220)	Mounting Bracket	373
PN 7000(21)L(90)	Mounting Bracket	373
PN 7000(28)	Tensioner	373
PN 7500	Vertical Anchorage Line System on Rigid Cable Line	373
PN 7500(01)(112)	Pass Through Carriage	375
PN 7500(02)	Intermediate	373
PN 7500(05)	Set of 2-U Bolts, 1 wire rope cap and 1 Thimble	375
PN 800 (DP)	Tripod (7Ft)	326
PN 800 (DP)(10ft)	Tripod (10Ft)	326
PN 800 (DPW)(10ft)	Tripod with Wheels (10Ft)	326
PN 800 (DPW)(7ft)	Tripod with Wheels (7Ft)	326
PN 800(42)	Foot Rest	325
PN 800(42)	Foot Rest	325
PN 800(44)	Mounting Brackets for Tripod	326
PN 800(45)	Mounting Brackets for Tripod	326
PN 802	Door and Window Anchorage	283
PN 803	Cross Arm Strap	284
PN 804	Cross Arm Strap	284
PN 804(FR)	Flanil Flame Resistant Cross Arm Anchor Strap	206
PN 805	Cross Arm Strap	284
PN 806	Cross Arm Strap	284
PN 807	Cross Arm Strap	284
PN 807(20)	Cross Arm Strap	284
PN 808	Cross Arm Strap	284
PN 809	Concrete Anchor Strap	284
PN 813	Anchorage Steel Wire Rope Sling	285
PN 814	Anchorage Stainless Steel Wire Rope Sling	285
PN 815	Telescopic Pole System	286
PN 815(01)	Head	286
PN 815(02)	Extension Section	286
PN 815(03)	Hanging Hook	286
PN 815(04)	Telescopic Pole	286
PN 821L	Telescopic Pole for Rescue	287
PN 821N	Telescopic Pole for Rescue	287
PN 852	Evacuation Triangle	355
PN 8000	Vertical Anchorage Line System on Rigid Aluminium Rail	376
PN 8000(01)	Vertical Trolley	376
PN 8000(01)	Vertical Trolley	376
PN 8000(02)	Alu Extension	376
PN 8000(02)	Alu Extension	376
PN 8000(03)	Rung Clamp	376
PN 900	Cantilever K-Pod	330
PN 900(01)	Floor Mounting Bracket	330
PN 900(01)	Floor Mounting Bracket	330
PN 900(02)	Wall Mounting Bracket	330
PN 900(02)	Wall Mounting Bracket	330
PN 900(06)	Mounting Bracket for K-Pod	330
PN 900(07)	Mounting Bracket for K-Pod	330
PN 910	Twisted Rope Anchorage Line (14 mm)	300
PN 910 (KRAL12)	Kernmantle Rope Anchorage Line (12 mm)	300
PN 910 (KRAL12)(S)	Kernmantle Rope Anchorage Line with Energy Absorber (12 mm)	300
PN 910 (KRKD11)	Kernmantle Rope Anchorage Line (11 mm)	300
PN 920	Twisted Rope Anchorage Line (14 mm)	300
PN 920 (KRAL 12)(S)	Kernmantle Rope Anchorage Line with Energy Absorber (12 mm)	300
PN 920 (KRAL12)	Kernmantle Rope Anchorage Line (12 mm)	300
PN 920 (KRKD11)	Kernmantle Rope Anchorage Line (11 mm)	300
PN 930	Twisted Rope Anchorage Line (14 mm)	300
PN 930 (KRAL12)	Kernmantle Rope Anchorage Line (12 mm)	300
PN 930 (KRAL12)(S)	Kernmantle Rope Anchorage Line with Energy Absorber (12 mm)	300
PN 930 (KRKD11)	Kernmantle Rope Anchorage Line (11 mm)	300
PN 940	Twisted Rope Anchorage Line (14 mm)	300
PN 940(KRAL12)	Kernmantle Rope Anchorage Line (12 mm)	300
PN 940(KRAL12)(S)	Kernmantle Rope Anchorage Line with Energy Absorber (12 mm)	300
PN 940(KRKD11)	Kernmantle Rope Anchorage Line (11 mm)	300
PN 950	Twisted Rope Anchorage Line (14 mm)	300
PN 950 (KRKD 11)	Kernmantle Rope Anchorage Line (11 mm)	300
PN 950(KRAL12)	Kernmantle Rope Anchorage Line (12 mm)	300
PN 950(KRAL12)(S)	Kernmantle Rope Anchorage Line with Energy Absorber (12 mm)	300
PN 9X19	Wire Rope (Cable Wire)	373
PN 9XXXS	Wire Rope (Cable Wire)	373
PN 9000	Vertical Anchorage Line System On Rigid Aluminium Rail	376
PN 9000(01)	Ladder Rung Assembly	377
PN 9000(02)	Aluminium Rail Extremity	376
PN 9000(03)	Aluminium Rail Intermediate	376
PN 9000(13)	Extendable Bracket	377
PN 9000(13)(EC)	Extendable Bracket	377
PN 9100	Twisted Rope Anchorage Line (14 mm)	300
PN 9150	Twisted Rope Anchorage Line (14 mm)	300
PN 9200	Twisted Rope Anchorage Line (14 mm)	300
PNF 01	Safety Fan Net	400
PR 01	Protective Sleeve	301
PR 02	Openable Protective Sleeve	301
PR 03	Openable Energy Absorber Cover	261
PRP 01	Rigging Plate	349
PRP 02	Rigging Plate	349
PW 1101	Workwear Regular Range	91
PW 1201	Workwear Regular Range	91
PW 2101	Workwear Premium Range	92
PW 2102	Workwear Premium Range	92
PW 2201	Workwear Premium Range	92
PW 2202	Workwear Premium Range	92
PWIFR 11011K	Workwear Inherent Fire Resistant Range	94
PWIFR 11021K	Workwear Inherent Fire Resistant Range	94
PWIFR 12011R	Workwear Inherent Fire Resistant Range	94
PWIFR 12021R	Workwear Inherent Fire Resistant Range	94
RCH 01	Disposable Cup Shape Respirator with Headband - Select Series	15
RCH 01+	Disposable Cup Shape Respirator with Headband and Exhalation Valve - Select Series	15
RCH 02	Disposable Cup Shape Respirator with Headband - Prime Series	16
RCH 02+	Disposable Cup Shape Respirator with Headband and Exhalation Valve - Select Series	15
RCH 11	Disposable Cup Shape Respirator with Headband - Prime Series	16
RCH 11+	Disposable Cup Shape Respirator with Headband and Exhalation Valve - Prime Series	17
RCH 12	Disposable Cup Shape Respirator with Headband - Prime Series	16
RCH 12+	Disposable Cup Shape Respirator with Headband and Exhalation Valve - Prime Series	17
RCH 13+	Disposable Cup Shape Respirator with Headband and Exhalation Valve - Prime Series	17
RF 01	Disposable Respirator Respirator with Ear Loops - Select Series	5
RF 01+	Disposable Face Respirator with Ear Loops and Exhalation Valve - Select Series	5
RF 02	Disposable Face Respirator with Ear Loops - Select Series	8
RF 02+	Disposable Face Respirator with Ear Loops and Exhalation Valve - Select Series	5
RFH 01	Disposable Face Respirator with Headband - Select Series	6
RFH 01+	Disposable Face Respirator with Headband and Exhalation Valve - Select Series	6
RFH 02	Disposable Face Respirator with Headband - Select Series	6
RFH 02+	Disposable Face Respirator with Headband and Exhalation Valve - Select Series	6
RFH 10	Disposable Face Respirator with Headband - Select Series	6
RFH 11	Disposable Face Respirator with Adjustable Headband - Prime Series	11
RFH 11+	Disposable Face Respirator with Adjustable Headband and Exhalation Valve - Prime Series	11
RFH 12	Disposable Face Respirator with Adjustable Headband - Prime Series	11
RFH 12+	Disposable Face Respirator with Adjustable Headband and Exhalation Valve - Prime Series	12
RFH 13+	Disposable Face Respirator with Adjustable Headband and Exhalation Valve - Prime Series	11
RFH 20	Disposable Face Respirator with Headband - Select Series	6
RFH 22+ OV	Disposable Painting Respirator with Headband and Exhalation Valve	27
RFH 32+ OV	Disposable Welding Respirator with Headband and Exhalation Valve	25
RFM 50	Disposable Surgical 3Ply Face Mask with Earloops	28
RFM 51	Disposable Surgical 3Ply Face Mask with Tie Back Strap	28
RFTH 11	Disposable Fish Type Respirator with Headband	21
RFTH 11+	Disposable Fish Type Respirator with Headband and Exhalation Valve	21
RFTH 12	Disposable Fish Type Respirator with Headband	21
RFTH 12+	Disposable Fish Type Respirator with Headband and Exhalation Valve	21
RFTH 13	Disposable Fish Type Respirator with Headband	21
RFTH 13+	Disposable Fish Type Respirator with Headband and Exhalation Valve	21
RG 01	Rope Grab	293

Ref. No.	Products Name	Page No.
RG 02(112)	Rope Grab	293
RG 02S(PN 600(S)) 112	Rope Grab	293
RG 03	Rope Grab	293
RG 05	Rope Grab	293
RG 06	Rope Grab	293
RG 07	Rope Grab	293
RG 08	Rope Grab	293
RG 09	Rope Grab	293
RG 09F	Rope Grab (Fixed)	298
RG 11	Rope Grab	293
SA 08	Beam Anchor	279
SA 08M	Beam Anchor (Small)	279
SA 09	Aluminium Point Anchor	277
SA 10	Steel Point Anchor	277
SA 10A	Steel Point Anchor	277
SA 11	Parapet Anchor	281
SA 11B	Parapet Anchor with Extended Movable Arm	281
SA 12	Stainless Steel Chemical Point Anchor	278
SA 13	Girder Steel Anchor	281
SA 13A	Concrete Steel Anchor	281
SA 15	Beam Anchor Trolley	279
SA 15A	Beam Anchor Trolley	279
SA 15B	Di-Electric Beam Anchor Trolley	280
SA 16	Concrete Anchor	280
SA 17	Megapod	325
SA 17(25)	Mounting Bracket for Megapod	325
SA 17(26)	Mounting Bracket for Megapod	325
SA 17(26)	Mounting Bracket for Megapod	332
SA 17(W) 7ft	Megapod with Wheels	326
SA 20	Edge Anchor	282
SA 22	Extremity Anchor Plate	390
SA 22SS	Stainless Steel Extremity Anchor Plate	390
SA 23	Intermediate Anchor Plate	390
SA 23SS	Stainless Steel Intermediate Anchor Plate	390
SA 28	Edge Fix Anchor Post	304
SA 38A(C)(90)N	Constant force Energy Absorber Corner Bend 90° for Trapezoidal Roof Top	388
SA 38A(E)(SW)	Constant force Energy Absorber Extremity with Swivel Eye for Trapezoidal Roof	383
SA 38A(E)N	Constant force Energy Absorber Extremity for Trapezoidal Roof	388
SA 38A(I)N	Constant force Energy Absorber Intermediate for Trapezoidal Roof	388
SA 41	Flange Anchor	278
SA 42-12	Flange Anchor	278
SA 43	Hexapod	328
SA 43(W)	Hexapod with Wheels	328
SA 48	Container Anchor Post	283
SA 48(SW)	Container Anchor Post	283
SA 51A(C)(90)N	Constant force Corner Post for Standing Seam Roof	389
SA 51A(CL)(E)(01)	Aluminium Bracket for Klip Lok Roof Sheet	384
SA 51A(CL)(E)(02)	Aluminium Bracket for Klip Lok Roof Sheet	384
SA 51A(CL)(E)(03)	Aluminium Bracket for Klip Lok Roof Sheet	384
SA 51A(E)(SW)	Constant force Energy Absorber Extremity with Swivel Eye for Standing Seam Roof	383
SA 51A(E)N	Constant force Energy Absorber Extremity for Standing Seam Roof	389
SA 51A(I)N	Constant force Energy Absorber Intermediate for Standing Seam Roof	389
SA 87A(C)(90)	Anchor Plate with Corner Bend	385
SA 87A(C)(90)350	Anchor Plate with Corner Bend	385
SA 87A(E)	Extremity Anchor Post for Trapezoidal Roof	385
SA 87A(E)350	Extremity Anchor Post for Trapezoidal Roof	385
SA 87A(I)	Intermediate Anchor Post for Trapezoidal Roof	385
SA 87A(I)350	Intermediate Anchor Post for Trapezoidal Roof	385
SA 111(12)	Anchor Post	391
SA 111(18)	Anchor Post	391
SA 111(300)	Anchor Post	391
SA 111(500)	Anchor Post	391
SA 111(750)	Anchor Post	391
SA 115	Anchor	292
SA 116 S(C)(90)	Anchor Post Corner for Standing Seam Roof	387
SA 116CL(E)SUB4	Aluminium Bracket for Klip Lok Roof Sheet	384
SA 116CL(E)SUB5	Aluminium Bracket for Klip Lok Roof Sheet	384
SA 116CL(E)SUB6	Aluminium Bracket for Klip Lok Roof Sheet	384
SA 116S(E)	Anchor Post Eye for Standing Seam Roof	387
SA 116S(I)	Anchor Post Intermediate for Standing Seam Roof	387
SLBL 10	Armor Block with Sealed Casing	312
SLBL 15	Armor Block with Sealed Casing	312
SLBL 20	Armor Block with Sealed Casing	312
SLBL 30	Armor Block with Sealed Casing	312
STS 01(N)	Suspension Intolerance strap	231
T01A	T-line with Winch	292
TL 01(N)	Tools Lanyard	232
TL 02(N)	Twin Tools Lanyard	232
TL 10	Retractable Tools Lanyard	232
WW 01(10)	Aluminium Bracket for Standing Seam Post	397
WW 01(21)S	Walkways on Standing Seam Roof	393
WW 01(21)T	Walkway on Trapezoidal Seam Roof	394
WW 01(29)S	C-Channel Assembly for Walkway on Standing Seam Roof	396
WW 01(29)SUB1	C-Channel	396
WW 01(29)T	C-Channel Assembly for Walk Way on Trapezoidal Roof	396
WW 01(39)	Aluminium Bracket for Standing Seam Post	397
WW 01S(SS)SUB3	Walkway Wide Bracket with Fixation Clamp	396
WW 03T	Walkway Aluminium Step for Trapeziodal Seam Roof	395
WW 03S	Walkway Aluminium Step for Standing Seam Roof	395

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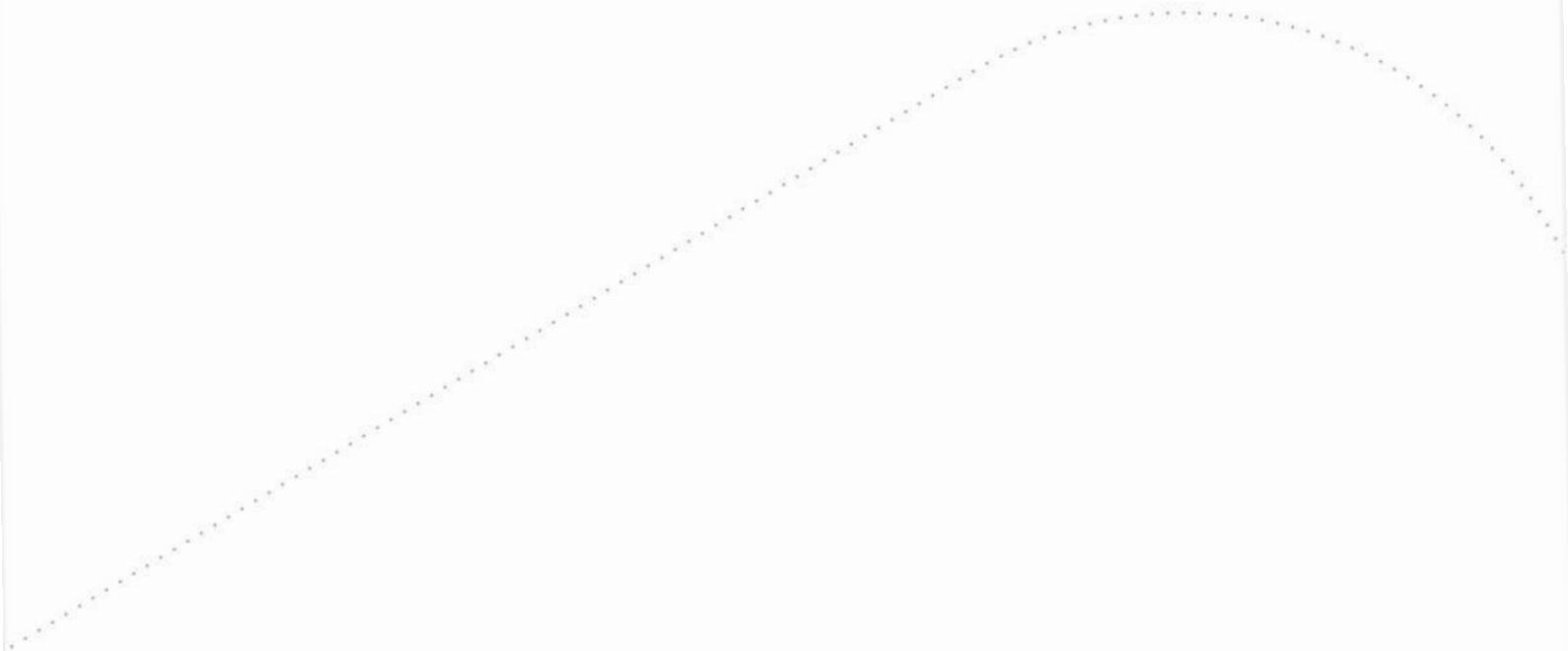
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