

欣达 铝制圆环 使用说明书

型号 HH-9779

ver.202608/A

警告

- 使用本设备的相关活动本身存在固有风险，可能导致重伤甚至死亡。您必须为自身的行为和决策负责。
- 使用前请阅读并理解本使用说明。
- 使用本产品前，您必须接受足够的培训，掌握相关基础操作与技术知识。
- 本产品不可超极限使用，也不可用于设计用途以外的其他场景。
- 若您对本手册存在疑问或理解困难，请联系欣达。

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通过ISO9001质量管理体系认证

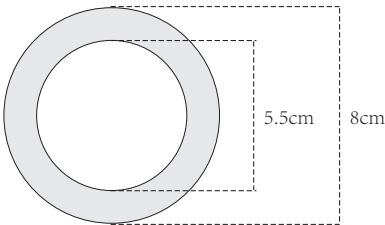


安全注意事项

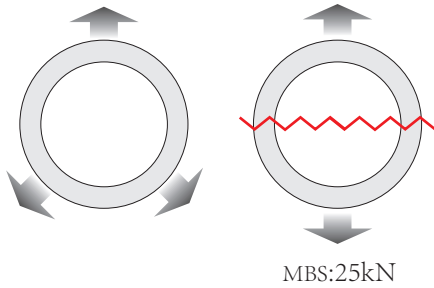
这份说明书将向您解释如何正确使用您的装备。这里只描述确定无误的技术和使用方法。警告标记将告知您使用该装备时的潜在危险，但并不详尽无遗。您有责任阅读每一条警示且正确使用您的装备。任何错误的使用都将造成额外危险。如果您有任何疑问或对于理解这些文件有困难的话，请联系欣达。

	表示有产生严重伤害或死亡的风险
	表示有潜在意外或伤害风险
	表示正确的使用方法
	表示错误的使用方法

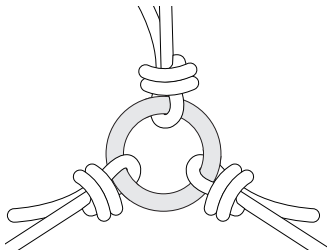
尺寸



受力方向 破断拉力



使用实例



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使用说明

适用范围

用于高空坠落保护的 personal 保护设备(PPE)。
使用该产品时，不可超出其负荷限制，也不可用于设计之外的用途。
适用工作温度：-20℃ ~ +50℃

强度参数说明

MBS = 最小破断载荷。
每款主锁均经过 10kN 出厂验证拉力测试。
备注：拉力测试采用 10mm/12mm 标准钢销；扁带、杆件造成非主轴偏心受力时，实际破断强度会下降。
额定工作载荷 (WLL) 建议取最小破断载荷的 1/10 ~ 1/5，需同步遵循绳索作业相关规范。
警示：主锁承受拉力状态下禁止开启锁门。

配件适配说明

圆环用于防坠落、作业定位、限位、救援等全套防护系统，配件匹配才能保障安全。

安全检查规范

每次使用前检查
- 确保圆环没有磨损、裂纹、形变以及腐蚀。
使用过程检查
- 经常检查产品的状况及其与系统内其他设备的连接状况，是至关重要的。确保系统内所有设备均互相正确连接。

主要材质：铝。

附加安全须知

- 使用者身体条件必须符合高空作业要求；高空悬空失去意识会造成重伤、死亡，作业前必须制定完整救援方案。
- 攀登作业需考虑滑轮效应：坠落冲击会使上方锚点载荷放大 1.7 倍。
- 工业场景单锚点最小破断载荷 ≥ 12kN，符合 EN 795 标准；锚点位置需高于人体连接点位。计算坠落安全距离时需计入主锁长度，防止坠落撞击地面或障碍物。
- 整套防护系统的承载极限由强度最弱的配件决定。
- 避免绳索、编织扁带与锐边、粗糙表面摩擦。
- 使用前完成风险评估并落实防护措施。
- 禁止单人独立高空作业，提前制定可落地的救援方案与配套工具。

使用寿命、定期检验与报废规范

- 合规干燥储存环境下金属部件无存放年限；塑料件最长存放 10 年，橡胶件最长存放 3 年。
- 发生误用、撞击、超载、配件不匹配时，设备单次使用后即需报废。
- 实际使用寿命取决于使用频次、作业的强度、恶劣环境（海水盐雾、泥沙、极端温湿度等）。除每次使用前常规检查外，每年至少 1 次全面年检，使用越频繁检测次数越多，完整留存全部检测记录。
- 检测人员必须持证或经厂家官方授权。

检验项目

a) 设备无腐蚀、熔损、裂纹、磨损、变形、污渍；主

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梁磨损深度不得超过 1mm；
b) 产品标识文字清晰可辨；检测出现变形、锁门失灵等不合格情况，需维修、送厂复检或直接报废。

检测台账必填内容

产品型号、追溯码、采购日期、生产日期、首次启用时间、执行标准、检测日期、缺陷与维修记录、检测结论（继续使用 / 报废）、下次检测日期、检测人员的姓名及联系方式。

强制报废条件

- 产品使用历史无法追溯；
- 对设备强度、安全性能存在任何疑虑；
- 未通过个人防护装备专项检测；
- 锁闭、承重功能出现故障；
- 不符合现行法规、标准；
- 承受重大坠落冲击或超负荷载荷。

报废处理方式

粘贴永久性不可擦除报废标签，或钻孔、切割破坏设备杜绝二次使用；也可寄回厂家统一处置。

责任说明

- 使用者对自身操作、判断承担全部责任，无力承担安全责任禁止使用。
- 仅限持证专业人员，或资深专业人员全程监护下使用本品。
- 使用前完成理论 + 实操培训，掌握高空作业基础、装备配套安全规范。
- 外销至其他国家 / 地区时，说明书需配套当地语言版本。
- 非产品质量问题造成的直接、间接损失，欣达不予承担。

储存与运输

金属设备冲洗干净污渍并且完全晾干，存放于干燥的环境；储存、运输期间禁止接触磨料、重物、化学品、锐边、热源。金属主锁单独收纳于专用容器，全程遵循储存环境要求，建议专人统一管理存放。

维护保养

规范保养存放可延长设备寿命、保障使用安全

- 磨损修复：金属尖锐物划伤、表面粗糙、细微划痕可用砂纸打磨；磨损 / 划痕深度严禁超过 1mm。
- 清洁：20℃ 清水搭配软毛刷内外冲洗，禁止高压水枪、工业强清洁剂；清水冲洗后自然阴干，严禁高温烘烤。
- 长期使用后转轴润滑会损耗，需定期涂抹润滑油 / 润滑脂。警示：严禁私自切割、打磨改装设备，所有维修仅可返回欣达原厂处理。

有限质保

欣达提供 3 年的质保，质保仅覆盖原材料、生产制造缺陷。质保免责范围：正常使用磨损、外力变形、氧化锈蚀、私自改装、误用、存放不当、保养缺失、超出设计用途使用等。

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INSTRUCTION FOR USE ALUMINUM RING

TYPE HH-9779

ver.202608/A

WARNING

Activities involving the use of this equipment are inherently dangerous and can lead to severe injury or even death. You must be responsible for your actions and decisions.

Read and understand the instructions before use. Before using this product, it is essential to have got adequate training, understood and mastered the basics and techniques.

This product must not be used beyond its limits, nor be used for any purpose other than for which it is designed.

If you have any doubts or difficulties in understanding this manual, please contact XINDA.

Zhejiang Bingfeng Outdoor Product Co., LTD
Phone number: +86 400-8856993
No.19 Xinchao Road, Wangjiang Community, Baiyun Street, Dongyang City, Jinhua City, Zhejiang Province, China.

ISO9001 Standards Complied

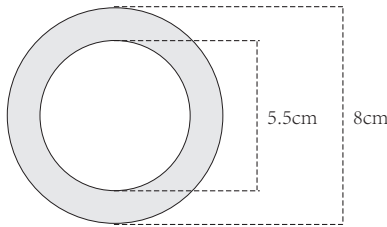


Safety precautions

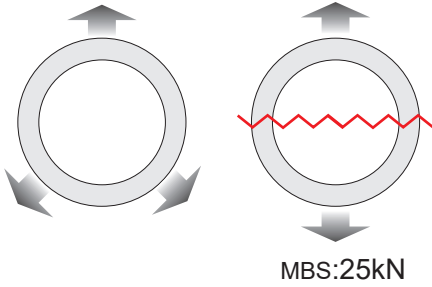
This manual explains how to use the equipment and only appropriate techniques and uses are described. Warning signs tell the potential risks but they don't cover everything. Please read every each warning carefully and use your equipment properly. Any misuse might lead to danger. If you are in doubt, please contact XINDA.

	Risk of severe injury or death
	Risk of accident or harm
	Appropriate way of
	Incorrect way of use

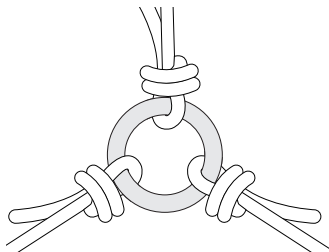
Size



Direction of Force Breaking Strength



Examples of Use



Instructions for Use

APPLICATION:

Personal Protective Equipment (PPE) for fall protection at height.
Do not exceed its load limit when using this product, and do not use it for purposes outside its designed scope.
Acceptable temperature: -20 C ~ 50 C.

STRENGTH:

MBS stands for minimum breaking strength.
Each carabiner has been proof-tested under 10kN.
Note: Two steel pins (10mm or 12mm) are used in the pulling tests of carabiners. The breaking strength will be lower under off-spine loading such as webbings or bars.
WLL (Working Load Limit) is suggested to be 1/10-1/5 of the MBS, which is also based on the rope access standards or regulations.

COMPATIBILITY:

Rings are used as connecting elements in personal fall protection systems, i.e. fall arrest, work positioning, rope access, restraint and rescue systems. Good compatibility means good functional interaction. Different shaped carabiners are suited to different equipment and environment.

SAFETY CHECK

Before each use:
Check the ring for wear, cracks, deformation and corrosion.
During each use:
Regularly inspect the product's condition and its connections to other equipment in the system — this is critical. Ensure all gear in the system is properly interconnected.

MAIN MATERIAL:

Aluminum.

ADDITIONAL INFORMATION:

- The user's health and body condition must be fit for working at heights. Unconscious suspension at height can lead to severe injury or even death. Ensure that a rescue procedure is in place.
- The pulley effect should be taken into consideration when climbing. Any impact on the climber will increase the loading on the top anchor by 1.7 times.
- In the industrial use, the breaking load of a single anchor point must be 12kN at least or meet the standards of EN 795. The position of anchor should be higher than the user's connection. In a fall arrest system, it is essential to take the length of carabiners into consideration and check the required clearance below the user in order to avoid any impact with the ground or with an obstacle in case of a fall.
- In a safety system, the weakest component determines the strength of the whole system.
- Avoid that the rope and other braided fabric rub against sharp edges or rough surfaces.
- A risk assessment is needed, and protection measures should be taken before use.
- Working alone is not allowed, and you should have a rescue plan and the means to implement it in case of encountered difficulties.

LIFE SPAN, REGULAR INSPECTION AND RETIREMENT:

- No storage limit for the metal in the proper environment; the plastic parts of the equipment can be stored up to 10 years and the rubber parts can be up to 3 years.
- The equipment may need to be retired only after one use because of misuse, accidents or compatibility problems.
- The practical lifespan depends on the type and intensity of usage, harsh environment (marine environment, extreme temperatures, sand and mud etc.). Equipment check has great effect on the lifespan. The comprehensive inspection is required once every 12 months minimum, apart from normal check before use, during use and after use. The greater the intensity of use, the more checks you need. Record the results of the inspection.
- The inspector must be competent or authorized by the manufacturer.
- Inspections included:
 - Check if the products are free of corrosion, melting,

cracks, wear, deformation or stain (the spine's wear can not be over 1mm);
b. Check if the markings are illegible;
You should maintain or retire the equipment, or hand to the manufacturer for further inspection when the results are negative such as deformation, malfunction of the gate.

INFORMATION INCLUDED ON THE INSPECTION MANUAL

Model number/data matrix/purchase date/manufacture date/first time to use/standards/inspection date/records (malfunction, condition, user's usage record) /results and suggestions (to retire the equipment or not)/next inspection date/inspector's data (name and contact).

WHEN TO RETIRE YOUR EQUIPMENT:

- You don't know its usage history.
- You doubt about its performance, strength or safety.
- It fails to pass PPE inspection.
- Malfunctions are found.
- It fails to meet updated regulations or standards.
- It has been subjected to a major fall or load.

HOW TO RETIRE YOUR EQUIPMENT

Mark it with irremovable labels or destroy it as to prevent further use. For instance, drill or cut it. Or return it to the manufacturer for disposal.

RESPONSIBILITIES

- You are responsible for your actions and decisions. If you cannot take the responsibilities, don't use it.
- Only qualified person or one under supervision of a competent and experienced person can use this product.
- You must take training course including theory and practice, basics for working at height, proper ways to use and relevant safety system knowledge before use.
- When it is resold to other countries or regions, the instruction manual must be made in local languages.
- XINDA is not responsible for any direct or indirect non-quality induced consequences.

STORAGE AND TRANSPORT:

Remaining fluid and other stain on metal equipment must be rinsed and dried and then stored in a dry environment. The equipment must not come into contact with abrasion, load, chemicals, sharp edges or heat source etc. as those are inherently harmful. Metal equipment must be specially stored in the container and transported in compliance with storage requirements.
The use and storage of the product is suggested to be taken care of by accountable people.

MAINTENANCE

Proper maintenance and storage can extend the lifespan of the equipment and also guarantee the user's safety.
1. Wear treatment: You can polish the carabiner surface with sandpaper when it is worn by sharp metal (like hangers), becoming rough or having cracks.
Note: The depth of the wear or cutting nick cannot be over 1mm!
2. Cleaning: Use clean water (20°C) and soft brush to rinse the external and internal of the product. No high-pressure water. No industrial-grade cleansers. Rinse afterwards and dry it naturally. No heat drying.
3. Long time use of the equipment will reduce the lubrication of the parts such as pivots. Lubricating oil or grease is suggested to be in use.
4. Warning: No modification, alternation or improper maintenance is allowed. It can only be repaired in the XINDA factory.

LIMITED WARRANTY:

XINDA provides a 3-year warranty against any material or manufacturing defects. Exclusions: normal wear and tear, deformation, oxidation, modifications or alterations, misuses, incorrect storage, poor maintenance, uses for which this product is not designed.