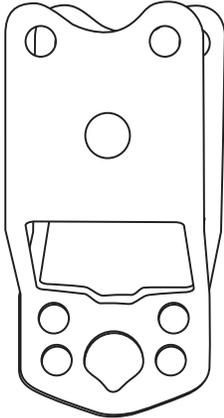
  
**XC CMC™**

## KOOTENAY ULTRA™ PULLEY

**USA  
MADE** 

MEETS THE PULLEY REQUIREMENTS OF NFPA 1983, INCORPORATED IN THE 2022 EDITION OF NFPA 2500.

- 300391-01 PULLEY, KOOTENAY ULTRA ORG, CMC, GENERAL USE (G)  
MBS 38 kN (8,543 lbf)

### WARNINGS

Activities involving the use of this device are potentially dangerous. You are responsible for your own actions and decisions. Before using this device, you must:

- Read and understand these user instructions, labels, and warnings.
- Familiarize yourself with its capabilities and limitations.
- Obtain specific training in its proper use.
- Understand and accept the risks involved.

**FAILURE TO HEED ANY OF THESE WARNINGS MAY RESULT IN SEVERE INJURY OR DEATH.**

### USER INFORMATION

User Information shall be provided to the user of the product. NFPA Standard 1983, incorporated into the 2022 edition of NFPA 2500 recommends separating the User Information from the equipment and retaining the information in a permanent record. The standard also recommends making a copy of the User Information to keep with the equipment and that the information should be referred to before and after each use.

Additional information regarding life safety equipment can be found in NFPA 1500 and NFPA 1858 and NFPA 1983, incorporated in the 2022 edition of NFPA 2500.

### LIFESPAN / INSPECTION / RETIREMENT

CMC does not specify an expiration date for hardware because the service life depends greatly on how and where it is used. The type of use, intensity of use, and environment of use are all factors in determining serviceability of the equipment. A single exceptional event can be cause for retirement after only one use, such as exposure to sharp edges, extreme temperatures, chemicals, or harsh environments. Remove retired equipment from service and destroy it to prevent further use.

A device must be retired when:

- It fails to pass inspection.
- It fails to function properly.
- It has illegible product markings.
- It shows signs of damage or excessive wear.
- It has been subjected to shock loads, falls, or abnormal use.
- It has been exposed to harsh chemical reagents.
- It has an unknown usage history.
- You have any doubt as to its condition or reliability.
- When it becomes obsolete due to changes in legislation, standards, technique or incompatibility with other equipment.

Inspect the equipment according to your department's policy for inspecting life safety equipment. CMC recommends a detailed inspection by a competent person at least once every 12 months depending on current regulations and conditions of use. Record the date, inspector name, and inspection results in the equipment log as well as any other relevant information to track the usage history.

Before each use, the user should:

- Confirm the device is functioning properly.
- Verify the presence and legibility of the product markings.
- Verify there is no excessive wear or indications of damage such as deformation, corrosion, sharp edges, cracks, or burrs. Minor nicks or sharp spots may be smoothed with emery cloth.
- Check for the presence of dirt or foreign objects that can affect or prevent normal operation such as grit, sand, rocks, and debris.

During each use, the user should:

- Confirm all pieces of equipment are correctly positioned with respect to each other.
- Monitor the condition of the device and its connections to other equipment in the system.
- Do not allow anything to interfere with the operation of the device or its components.
- Keep foreign objects out of the device.

### LIMITATIONS AND PROPER USE

All pulleys are designed to specific performance criteria. Be aware of load limitations, manner used, and proper technique. Do not overload a pulley. Pulleys can fail under improper use conditions such as loading with a side plate open or applying a bending, shear, or torsional load to the pulley, etc. If you are not sure of proper application or technique, seek proper training in pulley use and technical rope application.

The Kootenay sheave is equipped with two ball bearings for efficiency. The sheave can be locked for use as a high strength tie-off using the included screw. The Kootenay is compact while having the capability to pass knots. It has two extra holes that can be used for hoist lines, in addition to the standard tag line holes. See below for additional product-specific guidance.

- To prevent roll-out, use only locking carabiners. Do not allow ropes or objects to rub or twist the sleeve because this could unlock it. Vibration can also unlock a sleeve. Sleeves must be locked to achieve full strength.
- Check that the sheave is in good condition and freely rotates. Confirm security of the axle screw.
- Do not let an object in between the sideplates and never rig your system so that the pulley is forced against something that could break or open the sideplate.
- Sideplates must be closed and both must be attached to the anchor. Connecting to only one sideplate is forbidden. Pulleys must be free to align with the load, any restraint is dangerous.
- When using the pulley as a highline carriage or a knot-pass pulley, ensure that the sheave is unlocked and allows freewheeling.
- High Strength Tie-Off: For use as a High-Strength Tie-Off, ensure that the sheave is locked off by securing (hand tight) the locking bolt in one of the sheave holes. (The locking bolt can be secured in the axle assembly when not in use). Wrap the rope multiple times (at least 3, but not so many that the rope rolls over itself) around the sheave. The running end of the rope should be anchored using a separate carabiner to an anchor located behind the pulley or to the standing part of the rope. This use requires advanced special training. The rope must never contact a sharp edge. There are many hazards associated with applying high forces on a rope
- Edge Roller: The Kootenay Ultra Pulley may also be used as an edge roller. When using it as an edge roller make sure that the sheave is unlocked and is freewheeling. Also make sure that the pulley is secured in a manner to prevent it from falling over the edge.
- The additional holes allow complete separation of tag lines and hoist/reeve lines. Independent holes for hoist lines and the resulting separation from the reeving line help prevent spinning of the load below the highline. The extra holes also make rigging easier and help prevent carabiners from interfering with each other.

## CARRYING, MAINTENANCE & STORAGE

During all use, carrying, storage and transport keep the equipment away from acids, alkalis, rust and strong chemicals. Do not expose the equipment to direct heat, flame or high temperatures. Clean equipment using clean fresh

water to remove any dust or debris. Do not use a pressure washer for cleaning. If the equipment gets wet, remove excess moisture and allow to air dry at temperatures between 10° C and 30° C. Lubricate moving parts as needed. During storage and transport, protect the equipment from heat, direct sunlight, moisture, chemicals, and external loads or impacts. Do not store where the equipment may be exposed to moist air, particularly where dissimilar metals are stored together.

## WARRANTY & REPAIRS

If your CMC product has a defect due to workmanship or materials, please contact CMC Customer Support at [info@cmcprou.com](mailto:info@cmcprou.com) for warranty information and service. CMC's warranty does not cover damages caused by improper care, improper use, alterations and modifications, accidental damage or the natural breakdown of material over extended use and time. The equipment should not be modified in any way or altered to allow attachment of additional parts without the manufacturer's written recommendation. If original components are modified or removed from the product, its safety aspects may be restricted. All repair work shall be performed by the manufacturer. All other work or modifications void the warranty and releases CMC from all liability and responsibility as the manufacturer.

## SAMPLE INSPECTION AND MAINTENANCE LOG

The following sample log provides an example of the records that can be maintained by the purchaser or user.

EQUIPMENT INSPECTION AND MAINTENANCE LOG			
Item _____ # _____		Date in Service _____	
Brand/Model _____		Strength _____	
Date	How Used or Maintained	Comments	Name

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