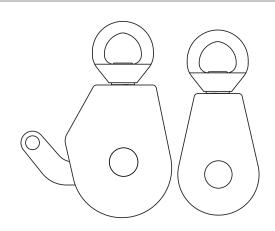


# XX CMC

# CSR<sup>2</sup> PULLEYS





# **A 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

- · 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.



EN12278:2007

**REGULATION (EU) 2016/425** 

NOTIFIED BODY CONDUCTING THE EU TYPE EXAMINATION: VVUÚ, A.S., NOTIFIED BODY 1019, PIKARTSKÁ 1337/7, 716 07 OSTRAVA-RADVANICE, CZECH REPUBLIC, TEL.: 00420 596 252 111, FAX: 00420 596 232 098

NOTIFIED BODY CONTROLLING PRODUCTION OF THIS PERSONAL PROTECTIVE EQUIPMENT:

SGS FIMKO LTD, NOTIFIED BODY 0598, TAKOMOTIE 8, 00380 HELSINKI, FINLAND, TEL. +358.9.696361

300342-03 CSR2 DOUBLE PULLEY.

- TYPE: PULLEY
- MBS: 40 kN (8,992 lbf)
- ROPE DIAMÈTER: 11 13MM

300343-03 CSR2 PULLEY.

- TYPE: PULLEY
- MBS: 40 kN (8,992 lbf)
- ROPE DIAMÈTER: 11 13MM



Scan for the latest

of this manual.

version and translations

CMC Rescue, Inc. 6740 Cortona Drive Goleta, CA 93117, USA 805-562-9120 / 800-235-5741 cmcpro.com

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

- 300343-03 CSR2 PULLEY, GENERAL USE (G) MBS 40 kN (8,992 lbf)
- 300342-03 CSR2 DOUBLE PULLEY, GENERAL USE (G) MBS 40 kN (8,992 lbf)
- MAX ROPE DIAMETER: 13MM

# Legend



Imminent risk of serious injury or death



Appropriate function or use.



Imminent risk of accident or injury.



Equipment incompatibility.

### **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

Additional information regarding life safety equipment can be found in NFPA 1550 and NFPA 1858 and NFPA 1983, incorporated in the 2022 edition of NFPA 2500.

#### FIELD OF APPLICATION

This equipment is personal protective equipment (PPE) used for protection of falls from height, this product meets the requirements of Regulation (EU) 2016/425 on personal protective equipment when used according to EN12278:2007. The EU declaration of conformity is available at cmcpro.com. This product must not be used beyond its limits or intended purpose.

#### PRODUCT MARKING

CE - CE confirms that the basic requirements of Regulation (EU) 2016/425 personal; protective equipment) are complied with.

**0598** - Notified body number which carries out quality control system for the final product.

EN - 12278:2007 Mountaineering Equipment - Pulleys - Safety Requirements and Test Methods.

MBS - Minimum breaking strength guaranteed by the manufacturer.

Part - Product identification number

i - Read the instructions before use

Lot - Manufacturer serial number. XX year of manu-facture / XXX day of manufacture / -X unit serial number

Figure1 (CSR<sup>2</sup> Pulley Only) - Typical rigging of mechanical advantage system. Always grip running end.

Ø 11 - 13mm: Range of compatible rope diameter.

MEETS NFPA 1983, INCORPORATED IN THE 2022 EDITION OF NFPA 2500

#### LIFESPAN / INSPECTION

Lifetime: Unlimited

WARNING: An exceptional event can lead you to retire a device after only one use, depending on the type and intensity of usage and the environment of usage (harsh environments, marine environment, sharp edges, extreme temperatures, chemical products, etc.)

A device must be retired when:

- It has been subjected to a major fall (or load).
- It fails to pass inspection.
- You have any doubt as to its condition or reliability.
- · You do not know its full usage history.
- It has been exposed to harsh chemical reagents.
- When it becomes obsolete due to changes in legislation, standards, technique or incompatibility with other equipment, etc.
- Destroy retired equipment to prevent further use.

CMC recommends a detailed inspection by a competent person at least once every 12 months (depending on current regulations in your country, and your conditions of use). Record the date of the inspection and the results in the equipment log. Before each use:

- Verify the presence and legibility of the product markings.
- Verify that the device has no cracks, deformation, excessive wear, corrosion, etc.
- Check for the presence of dirt or foreign objects that can affect or prevent normal operation (e.g. grit, sand, pebbles, etc.).
- Move the release arm through its range of motion.
- Check that the Sheave is in good condition and freely rotates.

If any of the above is noted, or if the equipment has been subjected to shocks, falls or any abuse other than normal use, or if there is any doubt about the serviceability, remove the equipment from service and destroy it.

#### **RIGGING THE CSR<sup>2</sup> PULLEY**

Self-tending pulleys are most often used in vertical systems with the pulley attached to a high anchor such as a tripod. When rigged with a double pulley, the mechanical advantage ratio is 4:1. The CSR² pulley is designed so that the sheave camming mechanism is only subjected to 1/4 of the load and there-fore should not be used as a conventional rope grab. It is therefore designed to be rigged in a traditional block & tackle method as pictured in Figure 1. During a raising operation, the rope will run through the pulley, and the cam will react as a ratchet to stop movement in the opposite direction. To lower, first ensure you have a firm grip on the running end of the rope, then fully release the rope-locking mechanism with the cord and begin lowering the load by feeding rope into the CSR²; preferably, for reasons of Figure 1 redundancy, this should be done by one person controlling the rope

- The running end of the rope exiting the pulley from the camming mechanism should always be tended with a firm grip (Figure 1).
- Ensure that the release lever has a completely unobstructed path for release and rope-locking.

and another controlling the cord (release lever).

- Use only 11-13 mm diameter rope and ensure that there is always a knot at the running end of the rope.
- Do not use a double sheave pulley with only one sheave loaded.
- Wet and icy conditions may impact the performance of the pulleys. Use caution in these conditions.

#### **COMPATIBILITY**

Verify that this product is compatible with the other elements in the system. (compatible = good functional interaction). Verify that this product is compatible with the other elements in the system. (compatible = good functional interaction). Equipment used with your pulley must meet current standards in your country, i.e.

- For EN use: EN 1891 Ropes or EN 362 Class B Carabiners.
- For NFPA use: NFPA 2500 (1983) 2022 Ed. Technical or General Use Ropes and Carabiners.
- The anchor point for the system should preferably be located above the user's position and should meet the requirements of the EN 795 standard (12 kN minimum strength).
- In a fall arrest system, it is essential to check the required clearance below the user before each use, to avoid hitting the ground or an obstacle in the event of a fall.
- Make sure the anchor point is correctly positioned to limit the risk and length of a fall.
- A full body harness is the only device allowable for supporting the body in a fall arrest system.

#### **CARRYING, MAINTENANCE, STORAGE & TRANSPORT**

Clean and dry this equipment after each use to remove any dust, debris and moisture. Use clean water to wash off any dirt or debris. Do not use a pressure washer to clean the device. If device gets wet, allow the device to air dry at temperatures between 10° C and 30° C, keep away from direct heat. During use, carrying, storage and transport, keep the equipment away from acids, alkalis, rust and strong chemicals. Ensure that the equipment is protected from external impact and keep out of direct sunlight. Do not expose the equipment to flame or high temperatures. Store in a cool, dry location. Do not store where the equipment may be exposed to moist air, particularly where dissimilar metals are stored together.

# **REPAIR**

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 & MAINTENANCE LOG**

The sample log suggests records that should be maintained by the purchaser or user of life safety equipment.

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