



Compliant with new European Regulation  
Conforme al nuovo regolamento europeo  
*Conforme à la nouvelle réglementation européenne*  
(EU) 2016/425

**PULLEYS  
CARRUCOLE  
POULIES**



**EN 12278:2007**



EN  
IT  
FR  
DE  
ES  
PT  
NL  
SV  
NO  
FI  
RO  
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CS  
SK  
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HR  
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中文  
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한글  
ไทย

CE 0123

W1

**Notified body controlling the manufacturing of the product:**

Organismo che controlla la fabbricazione del prodotto:  
Organisme controllant la fabrication du produit:

**TÜV SÜD Product Service GmbH**  
**Ridlerstraße 65, 80339 Munich – Germany – N.0123**

W2

**Notified body intervening for the EU type examination:**

Ente riconosciuto che interviene per l'esame UE del tipo:  
Organisme notifié intervenant pour l'examen UE de type:

**APAVE EXPLOITATION FRANCE SAS**  
**6 Rue du Général Audran - 92412 Courbevoie Cedex – France – N.0082**

**MARKING** - MARCATURA - MARQUAGES - KENNZEICHNUNG - MARCAJE - MARCAÇÃO - AANDUIDING - MÄRKNING - MERKING - MĚRKINTĚ - MARÇAȚUL - OZNACZENIA - OZNAČENÍ - OZNAKA - МАРКИРОВКА - 标记 - 마킹 - เครื่องหมายสัญลักษณ์ต่างๆ \_\_\_\_\_ 2

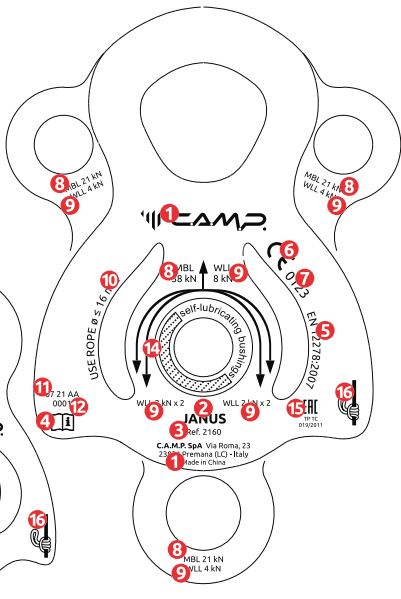
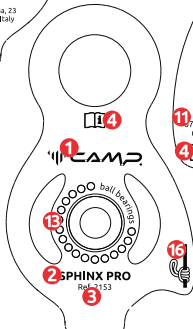
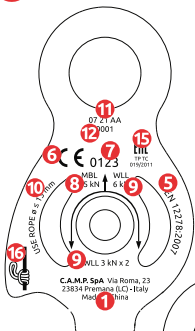
**NOMENCLATURE** - NOMENCLATURA - NOMENCLATURE - NOMENKLATUR - NOMENCLATURA - NOMENCLATURA - TERMINOLOGIE - KOMPONENTFÖRTECKNING - BETEGNELSER - OSALUETTELO - NOMENCLATURA - NAZEWNICZWO - SEZNAM ČÁSTÍ - SEZNAM IZRAZOV - СОСТАВНЫЕ ЧАСТИ - 各部位名称 - 사용 이름 - ระบบชื่อของส่วนประกอบ \_\_\_\_\_ 4

**FIGURES** - FIGURE - FIGURES - ABILDUNG - FIGURAS - FIGURAS - FIGUREN - FIGURER - FIGURER - KUVAT - FIGURI - RYSUNKI - OBRÁZKY - SLIKE - РИСУНКИ - 图 - 그림 - รูปภาพ \_\_\_\_\_ 12

ENGLISH	_____	17	POLSKI	_____	50
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ESPAÑOL	_____	28	HRVATSKI	_____	63
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SUOMI	_____	44	한국어	_____	79
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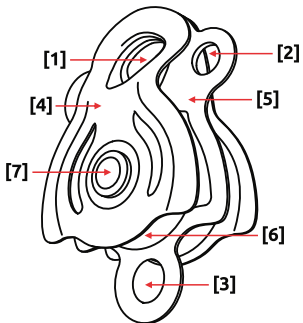
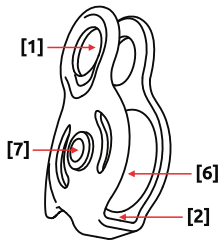
**LIFE SHEET** - SCHEDE DI VITA - FICHE DE DURÉE DE VIE - DATENBLATT - FICHA DE LA VIDA ÚTIL - FICHA DA VITA ÚTIL - ONDERHOUDSKAART - INFORMATIONSKORT - PRODUKTKORT - TUOTTEEN TARKASTUSLOMAKE - FIȘA DE DURABILITATE - KARTA WYROBU - PROVOZNÍ LIST - KONTROLNI LIST - БЛАНК ОСМОТРА - 使用寿命卡 - 수명도표 - แผนบันทึกการไ้ชงานผลิตภัณฑ์ \_\_\_\_\_ 88

# X MARKING - MARCATURA - MARQUAGES








- 1 Name and address of the manufacturer - Nome e indirizzo del fabbricante - Nom et adresse du fabricant
- 2 Name of the device - Nome del dispositivo - Nom du dispositif
- 3 Reference number of the product - Referenza del prodotto - Référence du produit
- 4 Read the instructions for use - Leggere le istruzioni di utilizzo - Lire la notice d'information
- 5 Suitable norm and year of publication - Norma di riferimento e anno di pubblicazione - Norme de référence et année de publication
- 6 Conformity marking according to European regulation (EU) 2016/425 - Marcatura di conformità al regolamento europeo (UE) 2016/425 - Marquage de conformité au règlement européenne (UE) 2016/425
- 7 No. of the notified body controlling the manufacturing of the product - N° dell'organismo che controlla la fabbricazione del prodotto - N° de l'organisme contrôlant la fabrication du produit
- 8 Minimum breaking load - Carico di rottura minimo - Charge de rupture minimum
- 9 Working load limit - Carico di lavoro limite - Charge de travail maximum
- 10 Allowable rope diameters - Diametri di corda ammessi - Diamètres de corde admis
- 11 Month and year of manufacture - Mese e anno di fabbricazione - Mois et année de fabrication
- 12 Serial number - Numero di serie - Numéro de série
- 13 Ball bearings - Cuscinetto a sfere - Axe sur roulement
- 14 Self-lubricating bushings - Bronzina autolubrificante - Axe sur coussinets
- 15 Certified model according to EAC standard (Russia-Belarus-Kazakhstan-Armenia-Kyrgyzstan) - Modello certificato in accordo alla norma EAC (Russia-Bielorussia-Kazakistan-Armenia-Kirghizistan) - Le modèle est certifié EAC (norme Russie-Biélorussie-Kazakhstan-Arménie-Kirghizistan)
- 16 Place for autolocking knot - Posizione per nodo autobloccante - Position pour le noeud autobloquant

**Y** NOMENCLATURE - NOMENCLATURA - NOMENCLATURE



- [1]** Main attachment hole - Foro di attacco principale - Trou d'amarrage principal
- [2]** Secondary attachment hole - Foro di attacco secondario - Trou d'amarrage secondaire
- [3]** Becket - Foro di attacco inferiore - Trou bas
- [4]** Side plate - Flangia laterale - Flasque laterale
- [5]** Central plate - Flangia centrale - Flasque central
- [6]** Sheave - Puleggia - Réa
- [7]** Axle - Asse - Axe

REF.	MOD.			MINIMUM BREAKING LOAD (MBL) (kN)		
				MAIN HOLE [1] fig.1A	SECONDARY HOLE [2] fig.1B	BECKET [3] fig.1C
0108	<b>Andry</b>	$\varnothing \leq 12$ mm	1	22 (11x2)		
2152	<b>Sphinx</b>	$\varnothing \leq 13$ mm	1	24 (12x2)		
2153	<b>Sphinx Pro</b>	$\varnothing \leq 13$ mm	1	25 (12,5x2)		
2154	<b>Tethys</b>	$\varnothing \leq 13$ mm	2	24 (12x2)		
2155	<b>Tethys Pro</b>	$\varnothing \leq 13$ mm	2	25 (12,5x2)		
2156	<b>Dryad</b>	$\varnothing \leq 13$ mm	3	24 (6x4)		15
2157	<b>Dryad Pro</b>	$\varnothing \leq 13$ mm	3	26 (6,5x4)		15
2158	<b>Naiad</b>	$\varnothing \leq 16$ mm	6	44 (22x2)	32	32
2159	<b>Naiad Pro</b>	$\varnothing \leq 16$ mm	6	46 (23x2)	32	32
2160	<b>Janus</b>	$\varnothing \leq 16$ mm	6	38 (9,5x4)	21	21
2161	<b>Janus Pro</b>	$\varnothing \leq 16$ mm	6	42 (10,5x4)	21	21

	WORKING LOAD LIMIT (WLL) (kN)			EFFICIENCY RENDIMENTO RENDEMENT	STANDARD		
	MAIN HOLE [1] fig.2A	SECONDARY HOLE [2] fig.2B	BECKET [3] fig.2C		 EN 12278	 TP-TC 019/2011	
	3 (1,5x2)			70%	●		100
	4 (2x2)			80%	●	●	95
	6 (3x2)			92%	●	●	85
	4 (2x2)			80%	●	●	100
	6 (3x2)			92%	●	●	90
	4 (1x4)		2	80%	●	●	170
	7 (1,8x4)		2	92%	●	●	155
	7 (3,5x2)	5	5	90%	●	●	280
	10 (5x2)	5	5	97%	●	●	300
	8 (2x4)	4	4	90%	●	●	405
	12 (3x4)	4	4	97%	●	●	425

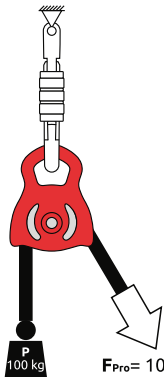
**B1**

**PULLEY SYSTEM EFFICIENCY  
RENDIMENTO DEI PARENCHI  
RENDEMENT DES MOUFLAGES**

**SMALL PULLEYS**

**1:1**

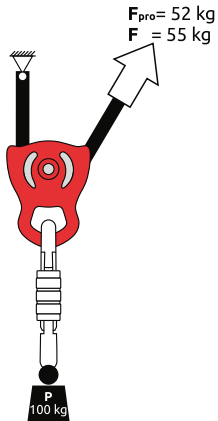
Sphinx Pro / Sphinx  
Tethys Pro / Tethys  
Dryad Pro / Dryad



$F_{Pro} = 109 \text{ kg}$   
 $F = 125 \text{ kg}$

**2:1**

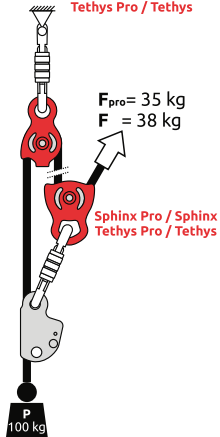
Sphinx Pro / Sphinx  
Tethys Pro / Tethys



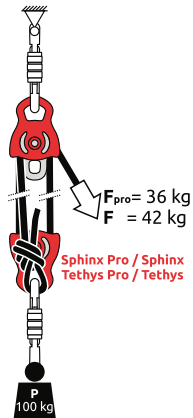
$F_{Pro} = 52 \text{ kg}$   
 $F = 55 \text{ kg}$

**3:1**

Sphinx Pro / Sphinx  
Tethys Pro / Tethys

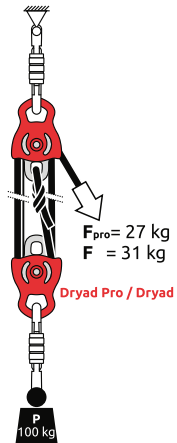


Dryad Pro / Dryad



**4:1**

Dryad Pro / Dryad



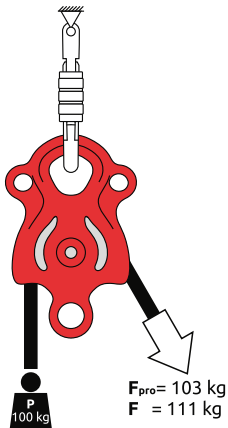
**B2**

**PULLEY SYSTEM EFFICIENCY  
RENDIMENTO DEI PARENCHI  
RENDEMENT DES MOUFLAGES**

**BIG PULLEYS**

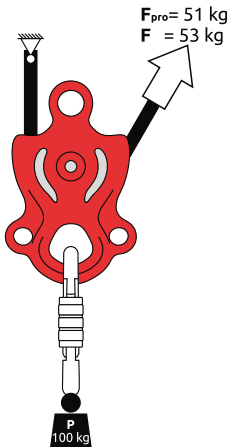
**1:1**

**Naiad Pro / Naiad  
Janus Pro / Janus**

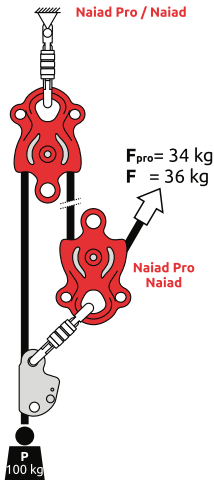


**2:1**

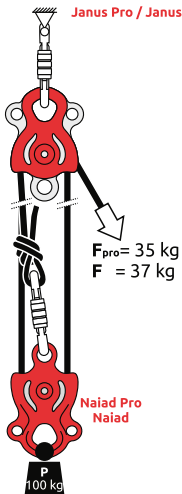
**Naiad Pro / Naiad  
Janus Pro / Janus**



**3:1**

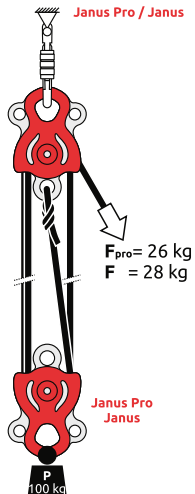


Janus Pro / Janus



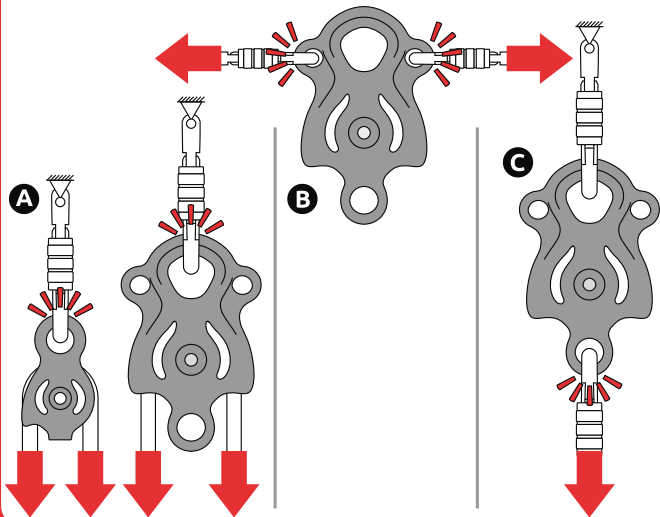
**4:1**

Janus Pro / Janus



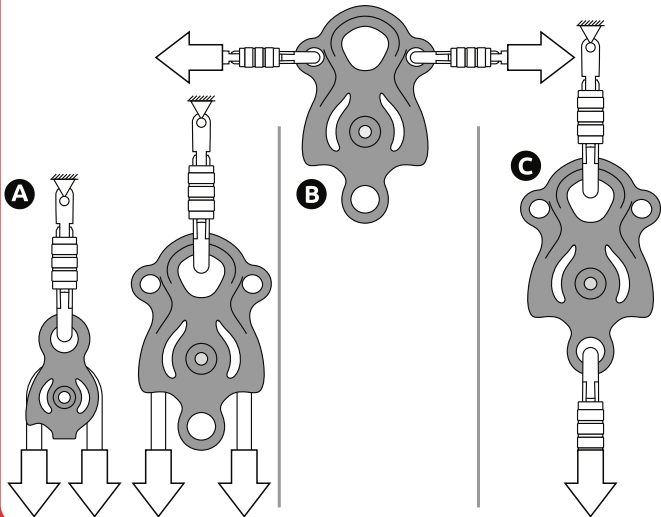
**1**

Minimum breaking load (MBL)  
Carico di rottura minimo  
Charge de rupture minimum

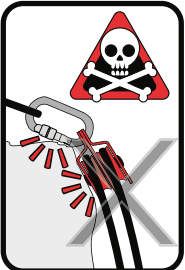
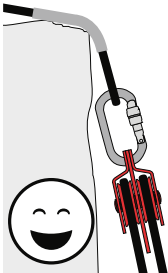
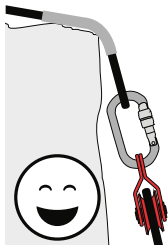
**TAB.A**

**2**

Working load limit (WLL)  
Carico di lavoro  
Charge maxi de travail

**TAB.A**

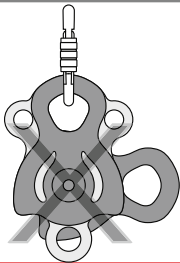
**3** Warning / Avvertenze / Avertissement



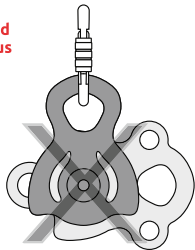
**Sphinx  
Sphinx Pro**



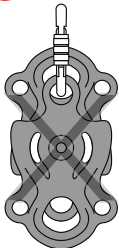
**4** Warning / Avvertenze / Avertissement



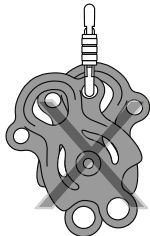
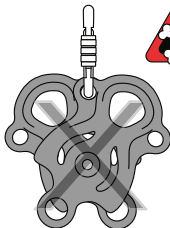
**Driad Pro / Driad  
Janus Pro / Janus**



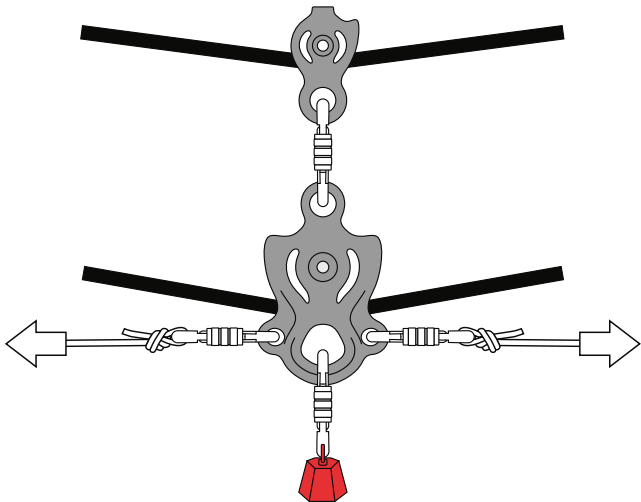
**5** Warning / Avvertenze / Avertissement



**Naiad Pro / Naiad**



**6** Tyrolean traverses / Teleferica / Tyrolienne



**GENERAL INFORMATION**

The C.A.M.P. Group meets the needs of workers at height with light and innovative products. These are designed, tested and manufactured to a certified quality system, ensuring reliable and safe products. These instructions inform you about the correct use throughout the life of the product: **read, understand, strictly respect and keep these instructions.** If lost, you can download the instructions from the web site [www.camp.it](http://www.camp.it). The EU declaration of conformity can be also downloaded from our site. The retailer must provide the instruction manual in the language of the country where the product is to be sold.

**USE**

This equipment should be used only by trained and competent persons. Otherwise the user should be under the direct supervision of a trained and competent person. This notice will not teach you the techniques for work at height or any other associated activity: you must have received qualified instruction before using this product. Climbing, and any other activity for which these products may be used, is inherently dangerous. The consequences of incorrect selection, misuse or poor maintenance of equipment could result in damage, serious injury or death. The user must be medically fit and capable to control his own security and any possible emergency situations. For equipment intended for use in fall arrest systems, it is essential for safety that the anchor device or anchor point should always be positioned, and the work carried out in such way as to minimise both the potential for falls and the potential fall distance. Verify the free space required beneath the user at the workplace before each occasion of use, so that, in the case of a fall, there will be no collision with the ground or the other obstacle in the fall path. A full body harness is the only acceptable body holding device that can be used in a fall arrest system. The product should only be used as instructed and no alterations should be made to it. It may be used in conjunction with any appropriate items of suitable specification and according to the EN standards, with due consideration to the limitations of each individual piece of equipment. This leaflet shows examples of improper utilizations of this product. Note that it is impossible to show or imagine all improper utilizations and that this product should be used only in the way specified by the manufacturer in this leaflet. If possible this product should be treated as personal. If used by multiple individuals, these instructions must be available for consultation and must be respected by all users.

**MAINTENANCE**

*Cleaning of the textile and plastic parts:* rinse in clean water and neutral soap (max temperature 30°C) and dry naturally away from direct heat. *Cleaning of the metallic parts:* rinse in clean water and then dry. *Sanitisation:* the procedures are available on the website [www.camp.it](http://www.camp.it). *Temperature:* Always keep this product below 80°C so as not to affect the performance of the product. *Chemicals:* withdraw the product from service if it comes into contact with chemical reagents, solvents or fuels which could affect the performance of the product. *Dirt that cannot be removed:* spots of unknown origin that cannot be removed should be considered chemical contamination and therefore require that the product be disposed of.

**STORAGE**

Store unpacked in a cool, dry and well-ventilated, dark place away from heat sources, high humidity, sharp edges, corrosives or other possible causes of damage. Do not leave the product exposed to the weather.

**RESPONSIBILITY**

The company C.A.M.P. SpA, or the distributor, will not accept any responsibility for damage, injury or death resulting from misuse of or from modifications to a C.A.M.P. branded product. It is the user's responsibility at all times to ensure that he/she understands the correct and safe use of any equipment supplied by or from C.A.M.P. SpA, that

he/she uses it only for the purposes for which it is designed and that he/she practices all proper safety procedures. Before using the equipment, take all necessary steps to familiarise yourself with rescue techniques should an emergency occur. You personally assume all the risks and responsibilities for your actions and decisions: if you are not able or not in a position to assume these, do not use this equipment.

### **3 YEAR WARRANTY**

This product is warranted against any faults in materials or manufacture for 3 years from the purchase date. Limitations of warranty include: normal wear and tear, modifications or alterations, incorrect storage, corrosion, damage due to accidents or negligence, use for which this product is not specifically designed.

## **SPECIFIC INFORMATION**

### **INSTRUCTIONS FOR USE**

#### Summary

These pulleys are Personal Protective Equipment (PPE) certified according EN 12278. This product is intended for use to protect and prevent against the risk of falling from a height in rescue operations, in work at a height, in the practice of mountaineering, rock-climbing and other vertical sports that use similar techniques. The pulley is a device for reducing the friction of a loaded rope so that heavy loads can be more easily lifted or lowered (see **Table A**).

#### Use

The choice of rope, suitable load and efficiency are shown in **Tables A** and **figures 1-2**.

The pulley must be attached to a safe anchor. The rope must run in the groove of the sheave **[6]** (**fig.3**). For the Janus and the Dryad the main attachment holes **[1]** of the two side plates **[4]** and the central plate **[5]** must be clipped together (**fig.4**). For the Naiad, do not clip the main attachment hole **[1]** with a secondary attachment hole **[2]** or with the becket **[3]** (**fig.5**). The Naiad and the Janus can be used for tyrolean traverses including safety line (**fig.6**). Some examples of pulley block are indicated in **Table B**. Humidity and cold temperatures may change the dynamic performance of this product but will have no influence on its resistance. The use of gloves is recommended while using pulleys.

### **CHECKING AND MAINTENANCE**

Check the wheel's rotation before use. If after cleaning, the wheel does not turn freely, lubricate the axis of the wheel with a silicon lubricator. Note: Cleaning and lubrication is recommended after every use in a marine environment. If, after oiling, the defect persists, the pulley must be taken out of use.

### **PERIODIC INSPECTION**

The safety of users depends upon the continued efficiency and durability of the equipment. In addition to normal visual inspection prior to, during, and after use, this product must be inspected by a competent person at least once every 12 months. This frequency should be increased if the equipment is used by multiple individuals or if subject to particularly harsh wear. The date of first use and of all inspections must be recorded on the product's lifeshet. Keep all inspection and reference documentation for the entire life of the product. Do not remove or tamper with the product labeling. Remove the product from service if its entire history is unknown and/or if the records are illegible. In case of one of the following defects are present, the product should be withdrawn from service immediately:

- malfunction or slackening of the wheel on the axle
- presence of cracks in the metallic parts
- permanent deformation of a metallic part

- deep corrosion that seriously alters the surface state of the metal (which does not disappear after a light rubbing with emery paper)
- wheel's use causes a detectable reduction of the groove in the pulley wheel

If the component or one of its parts shows signs of wear or defects, it must be replaced, even before the end of its expected lifetime. Attention: colors change can indicate chemical contamination. It must be replaced if there is any doubt about its condition. Each product in the safety system can be damaged during a fall and must be always inspected before use it again. Do not continue to use a product after a major fall because a damage may have occurred, even no external signs are visible.

#### **LIFETIME**

The lifetime of the product is unlimited, unless any defect appears and provided that periodic inspections are made at least once every 12 months from the date the product is first used and the results are recorded in the life sheet of the product. The following factors can reduce the lifetime of the product: intense use, damage to components of the product, contact with chemical substances, high temperatures, tears and abrasions, violent impacts, failure to maintain as recommended. When suspect that the product is no more safety and reliable, please contact C.A.M.P. SpA or the distributor.

#### **TRANSPORTATION**

Protect the product from risks such as those detailed above.



## **J** LIFE SHEET - SCHEDA DI VITA - FICHE DE DURÉE DE VIE

.....  
**1. Model** - Modello - Modèle

.....  
**2. Serial number** - Numero di serie - Numéro de série

.....  
**3. Month/Year of manufacture** - Mese/Anno di fabbricazione - Mois/Année de fabrication

.....  
**4. Purchase date** - Data di acquisto - Date de l'achat

.....  
**5. Date of first use** - Data del primo utilizzo - Date de la première utilisation

.....  
**6. User** - Utilizzatore - Utilisateur





[quefairedemesdechets.fr](http://quefairedemesdechets.fr)

June 2023 - Rev. 15  
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**INSTRUCTION MANUAL**  
**MANUALE ISTRUZIONI**  
**MANUEL D'INSTRUCTIONS**



C.A.M.P. SpA  
Costruzione Articoli Montagna Premana  
Via Roma, 23 - 23834 Premana (LC) - Italy  
Tel. +39 0341 890117 - Fax +39 0341 818010

[www.camp.it](http://www.camp.it) - [contact@camp.it](mailto:contact@camp.it)