PROLYTE

PROLYTE

Cell clamps

User manual

Original instructions

DN00198 Issue 1
March 2026

Area Four Industries

Manufacturer:

Area Four Industries Česko s.r.o.

Špindlerova 286

413 01 Roudnice nad Labem

Czech Republic

T +420 416 810 800

sales@prolyte.com

We have made every effort to ensure the accuracy of this manual. No liability will be accepted for errors. We reserve the right to change or alter our products or manuals without prior notice.

If you have a warranty claim, malfunction or spare part inquiry, contact your point of sale or the manufacturer.

If you have comments or improvement ideas for this document, please contact us at the e-mail address on the back cover. All comments and ideas will be carefully considered in the future development of the product or this document.

Contents

Change history

Issue	Date	Changes
1	March 2026	First issue

1 Introduction

This manual is intended for clamp owners, providers, skilled riggers and any person who has been trained in working safely with clamps. This manual assumes that you have been trained in, or work under the supervision of a competent or qualified person who has been trained in, safety and assembly.

1.1 About this product

PROLYTE cell clamps are devices for attaching and holding objects or fastening them together. They are designed to be repeatedly assembled and disassembled in order to carry loads in temporary installations, such as those used at events, or permanent installations, for example in places of entertainment. Depending on the application, PROLYTE cell clamps can be designated as lifting accessories or construction products according to EU Machinery Directive 2006/42/EC as well as DGUV V17 (German Social Accident Insurance Regulation 17, "Veranstaltungs- und Produktionsstätten für szenische Darstellung" (Event and production venues for theatrical performances)). They can also be installed as connecting parts in structures.

Lifting loads is generally dangerous. Therefore, clamps should only be installed and used by competent persons. Such persons should have corresponding technical training and experience which enable them to recognise risks and avoid hazards that could occur while using the products.

The load limit varies depending on the model and the required safety factor. Clamps are lasered/marked with the maximum load limit. Some clamp models are combinations of different parts, each of which has an individual load limit. The lowest of the individual load limits should therefore be used as the maximum load limit for the application. Resulting forces in the attached structure must be verified before you apply a load.

The manufacturer bears no liability for indirect consequential damage or financial loss. The manufacturer bears no liability for any changes made to the product or for any damage resulting from such changes.

If you are a user of this manual or of our products, we ask you to kindly notify PROLYTE of any errors and send us your suggestions for optimisations. Your input will be thoroughly evaluated for updates of this manual and the improvement of our products.

1.2 Related information

For more information on the product, see www.prolyte.com/products/aluminium-truss/accessories/clamps.

1.3 About this manual

Before working with the product, read this manual carefully and pay attention to the information provided. Use this manual to familiarise yourself with the product, its proper use and the safety regulations.

1.3.1 Safety conventions

DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.

⚠ WARNING
Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION
Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE
Indicates information that is considered important, but which is not hazard-related.

1.4 Terminology

Cell clamps are also referred to by the term "clamps" in the following.

Term	Definition
Cell clamp, clamp	Cell clamps are devices for attaching and holding objects or fastening them together. They are designed to be repeatedly assembled and disassembled in order to carry loads in temporary installations, such as those used at events, or permanent installations, for example in places of entertainment.
Competent person	A person who is capable of identifying existing and predictable hazards in the workplace and who is authorised to take prompt corrective actions to eliminate them. Competent persons are supervised by qualified persons. See "Qualified person".
Crack	A crevice-type discontinuity in a material.
Flat washer	A thin, disc-shaped plate with a hole in the middle.
Hook clamp	A clamp that can be mounted with the load directly onto a truss and fixed in position with one hand without having to be held (see Figure 3).
Lid	The lid is the name given to the closing part of a cell clamp.
Lifting eye	Suspension eye with a screw thread (see Figure 2).
Load and Resistance Factor Design (LRFD)	The Load and Resistance Factor Design (LRFD) method is based on the principle that the strength (resistance) of various materials is scaled down by some factors while the applied loads are scaled up by some factors, with the structural elements thereby being designed using reduced strength and increased loads.
Load limit	Maximum working load, as designed by the manufacturer.
Main chord	An element of a truss module that carries the forces associated with bending moments or axial forces or a combination of them.
Personal protective equipment	Equipment worn to minimise exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, physical, electrical, mechanical or other workplace hazards. This equipment may include items such as gloves, safety glasses and shoes, earplugs or earmuffs, hard hats and more.
Qualified person	A person who, by possession of a recognised degree or certificate of professional standing, or who by extensive knowledge, training

Term	Definition
	and experience, has successfully demonstrated the ability to solve problems relating to the subject matter or work. A qualified person supervises the competent persons. See "Competent person".
Repetitive use/ repeatedly assembled	Assembling and disassembling the same modules or assemblies on multiple occasions.
Safety factor	The safety factor expresses how much stronger a system is than it needs to be for an intended load. Many systems are intentionally built much stronger than needed for normal usage to allow for emergency situations, unexpected loads, misuse or degradation (reliability).
Spring pin	A spring pin is a mechanical fastener that secures the position of two or more parts of a product relative to each other. A spring pin is regarded as a self-retaining fastener (see Figure 1, etc.).
Structural data	Engineering data of structures.
Structural engineer	Structural engineers analyse, design, plan and research structural components and structural systems to achieve design goals and ensure the safety and comfort of users or occupants.
Swivel coupler	Double clamp in which the two clamps are connected to each other base-to-base and are mounted so that they are able to turn.
SWL1	Safe Working Load: safety factor 8:1 (kg) according to DGUV V17/BGV C1.
Truss	A framework, typically consisting of rafters, posts and struts, supporting a roof, bridge or other structure.
Truss module	A lattice structure intended to be used on its own or in combination with other modules.
Truss structure	An assembly made of truss modules.
User	A person or a company who or which assembles or uses modules or systems.
Wingnut	A nut with two large metal "wings", one on each side, so it can be easily tightened and loosened by hand (see Figure 1, etc.).

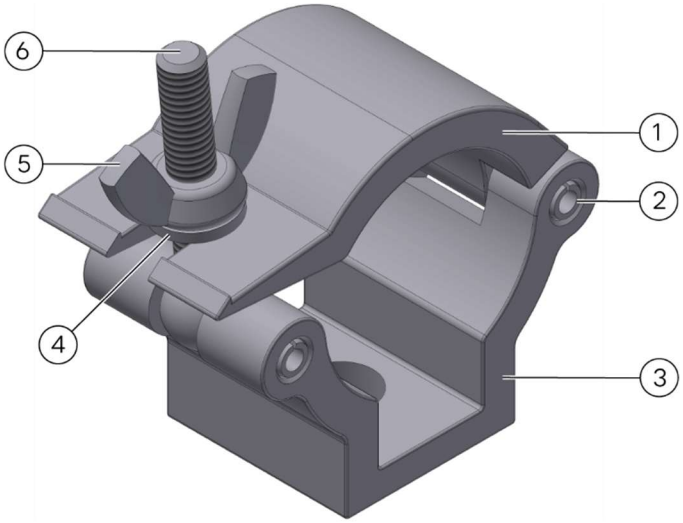


Figure 1: Standard cell clamp: e.g. CLP-P435

1	Lid	4	Flat washer
2	Spring pin	5	Wingnut
3	Base	6	Eye bolt

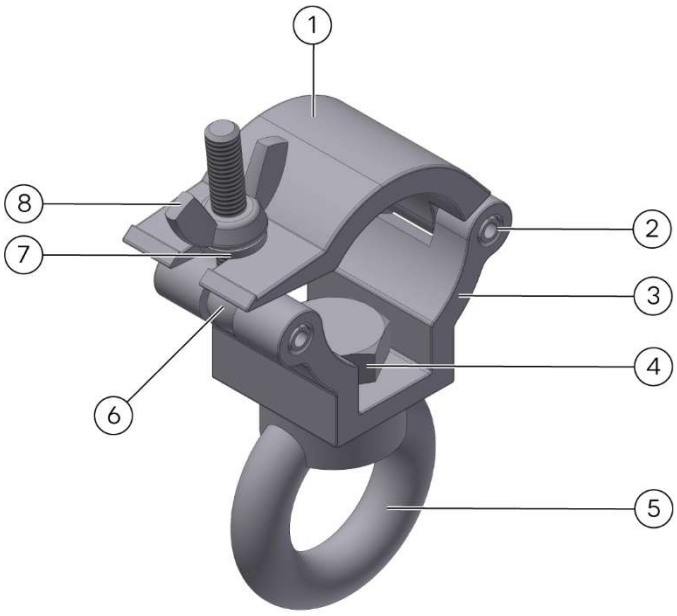


Figure 2: Standard cell clamp with lifting eye: e.g. CLP-P437

1	Lid	5	Lifting eye
2	Spring pin	6	Eye bolt
3	Base	7	Flat washer
4	Bolt M10x20	8	Wingnut

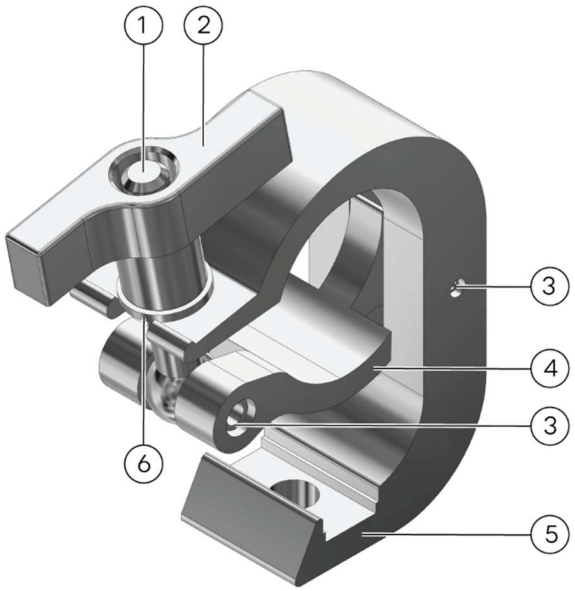


Figure 3: Hook clamp: e.g. CLP-P589

1	Eye bolt	4	Lid
2	Wingnut	5	Base
3	Spring pin	6	Flat washer

1.5 Standards

If used as lifting accessories, cell clamps are subject to the European Machinery Directive 2006/42/EC.

NOTICE

It is the sole responsibility of the owner or provider to check with the local authorities whether the legislation used by PROLYTE is acceptable in the country of use.

The following standards are taken into consideration for manufacturing, design and use:

- 2006/42/EC, European Machinery Directive
- DGUV V17, German Social Accident Insurance, Veranstaltungs- und Produktionsstätten für szenische Darstellung (Event and production venues for theatrical performances)
- DGUV Information 215-313, Lasten über Personen – Sicherheit bei Veranstaltungen und Produktionen von Fernsehen, Hörfunk, Film, Theater, Messen, Veranstaltungen (Safety at productions and events for television, radio, film, theatre, exhibitions: Loads above persons) (formerly known as BGI 810-3)
- BS 7905-1, Lifting equipment for performance, broadcast and similar applications – Part 1: Specification for the design and manufacture of above stage equipment (excluding trusses and towers)
- 305/2011/EC, European Construction Product Regulation
- DIN EN 1991, Eurocode 1: Actions on structures
- DIN EN 1993, Eurocode 3: Design of steel structures
- DIN EN 1999, Eurocode 9: Design of aluminium structures
- EN 754 (all parts), Aluminium and aluminium alloys – Cold drawn rod/bar and tube
- EN 755 (all parts), Aluminium and aluminium alloys – Extruded rod/bar, tube and profiles
- EN 515:1993, Aluminium and aluminium alloys – Wrought products – Temper designations

- EN 573 (all parts), Aluminium and aluminium alloys – Chemical composition and form of wrought products
- EN 10204:2004, Metallic products – Types of inspection documents

2 Safety

NOTICE

Read these safety texts carefully before working with the products.

NOTICE

Make sure manuals are available at all times for all users and employees.

⚠ WARNING

Do not mix structural data from different standards without knowing their respective safety principle.

⚠ WARNING

Take care when using data of structures based on Load and Resistance Factor Design (LRFD) standards, such as Eurocodes, or data based on Allowable Stress Design (ASD). A structural engineer can provide help.

⚠ WARNING

Do not use damaged or malfunctioning parts.

⚠ WARNING

Mark any damaged or worn material clearly and discard the material immediately.

2.1 Personal protective equipment

⚠ WARNING

PERSONAL INJURY HAZARD

For health and safety reasons, people moving, assembling, disassembling, maintaining or transporting the products should wear adequate personal protective equipment such as, but not limited to, gloves and safety shoes.

All people working with clamps should be instructed and informed about the correct usage and possible dangers before use.

3 Limitations of use

The cell clamps must always be used within the limits of the TÜV certificate and the declarations provided. The load capacity differs depending on the model and the safety factor required. Clamps are laser-engraved with the maximum working load.

The PROLYTE cell clamps described in this manual are not specifically designed for lifting people. Adequate load reduction and safety precautions according to local legislation must be taken into consideration when people are lifted.

If clamps are used to fasten equipment that is moved or suspended above areas where people are present or if the equipment is subject to vibrations, the wingnut must be replaced with a self-locking nut.

It must be ensured that the tightening torque is not exceeded after reaching the contact surface as follows:

For M10 bolts: 10 Nm (7.37 lbf ft)

For M12 bolts: 25 Nm (18.44 lbf ft)

Use the products only for their specified purpose. Any use other than the specified use is regarded as misuse. The user or operator, not the manufacturer, is liable for any damage or injury resulting from such cases of misuse.

In order to use the clamps, the user must also observe the safety regulations as well as the assembly and disassembly instructions contained in this manual.

We expressly prohibit the use of our clamps for scaffolding purposes under EN 74. This does not constitute intended use.

3.1 Environmental influences

3.1.1 Temperature

Cell clamps can be used in environmental conditions varying from -20°C to +80°C (-4°F to 76°F). However, take special care if cell clamps are used at temperatures below 0°C (32°F).

3.1.2 Aggressive environments

Take special care when cell clamps are used in, or in the vicinity of, aggressive environments. The aluminium alloys used in the cell clamps might not be suitable for these environments.

The alloys that are used have good properties in saltwater environments, but oxidation can occur on the surface. Clean them regularly with fresh water.

4 Transport, handling and storage

⚠ CAUTION

PERSONAL INJURY HAZARD

Handle the products with care. Do not drop them or drag them around. Do not throw cell clamps.

Dedicated boxes can be a highly effective means for transportation and storage.

Make sure that the products are stored and kept in a dry, ventilated environment to avoid corrosion.

Do not store aluminium clamps in steel boxes.

5 Identification

PROLYTE cell clamps are identified using laser engraving.

⚠ CAUTION

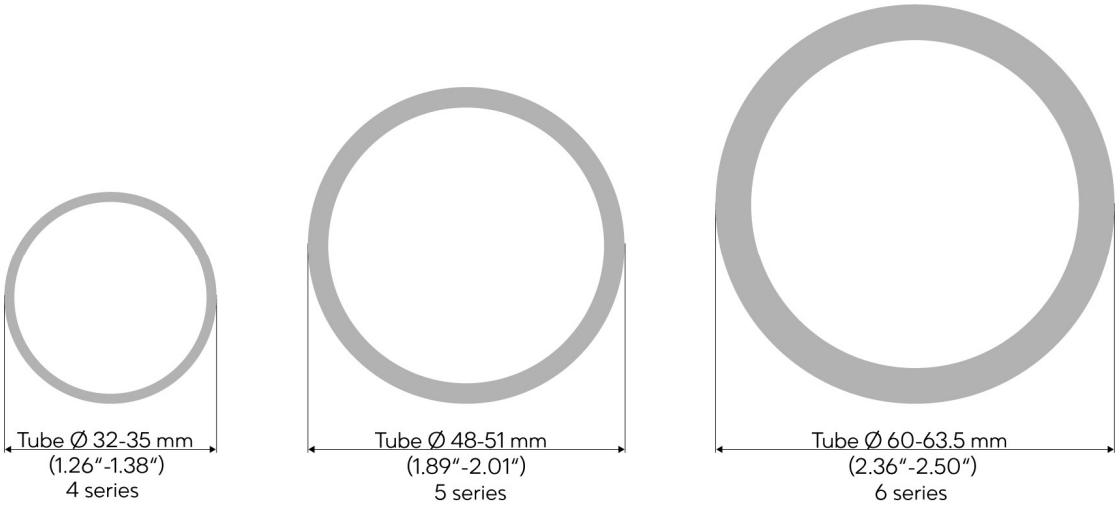
Make sure that only PROLYTE original components are used. For more information, contact your distributor or the manufacturer.

NOTICE

The product is always laser-engraved. Contact the manufacturer or its representative for corresponding information.

6 Technical specifications

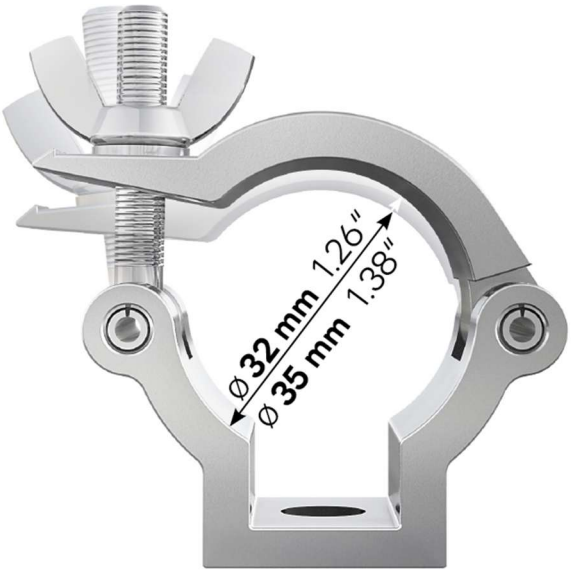
Overview of clamp series according to tube diameters:

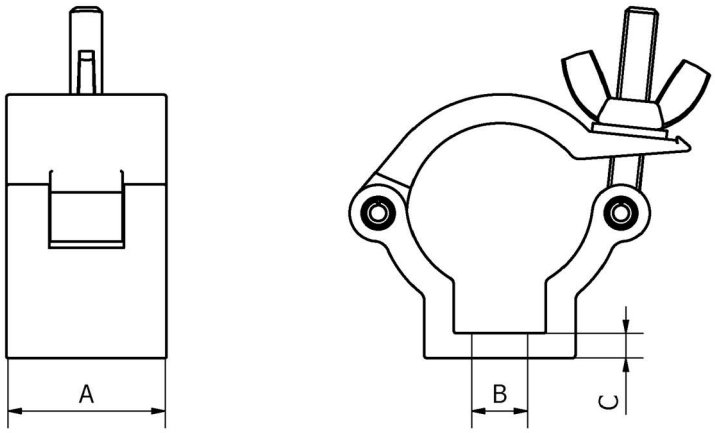


6.1 4 series clamps for tube diameter 32–35 mm (1.26"–1.38")

General information:

- Designed to fit 32–35-mm (1.26"–1.38") truss tubes
- Extruded using high-tensile aluminium alloy
- Compatible with the E20 truss series
- Polished surface with laser engraving
- Rated with safety factor 8:1 (kg) according to DGUV 17/BGV C1
- Interchangeable M10 eye bolt that ensures flexible attachment points
- Black anodised version available as standard; other colours available on request





A 30 mm (1.18 in)
B ø 10.5 mm (0.41 in)
C 5 mm (0.19 in)

CLP-P435

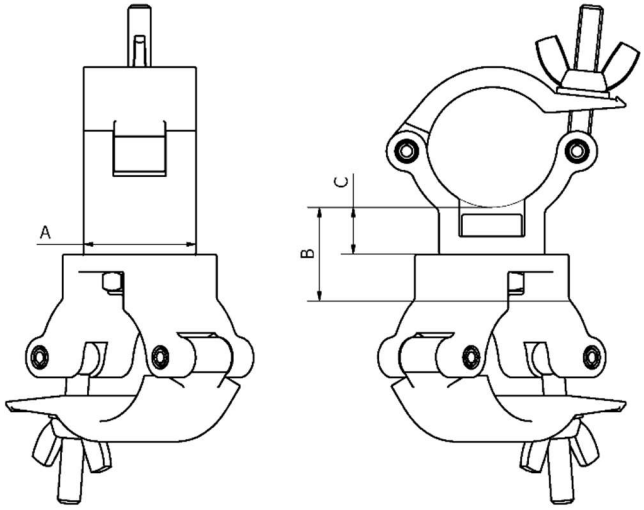
	SWL (SF 8:1)	Weight	Tube Ø
kg	160	0.08	32–35 mm
(lbs)	(353)	(0.18)	(1.26"–1.38")

Basic clamp, can be used for most applications.

CLP-P435B (black)

	SWL (SF 8:1)	Weight	Tube Ø
kg	160	0.08	32–35 mm
(lbs)	(353)	(0.18)	(1.26"–1.38")

Basic clamp, can be used for most applications.



A 30 mm (1.18 in)
B 25 mm (0.98 in)
C 12.5 mm (0.49 in)

CLP-P436

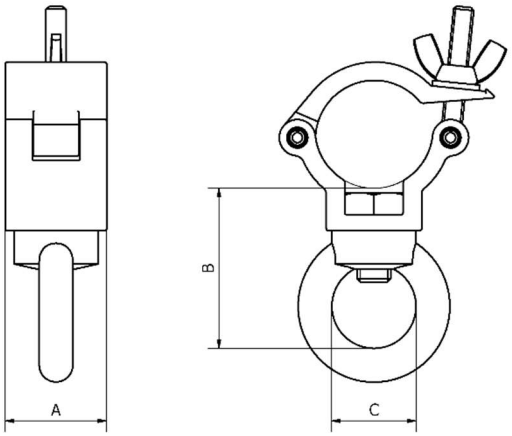
	SWL (SF 8:1)	Weight	Tube Ø
kg	160	0.16	32–35 mm
(lbs)	(353)	(0.35)	(1.26"–1.38")

Swivel coupler. Set of two clamps free to rotate 360° for connecting two tubes.

CLP-P436B (black)

	SWL (SF 8:1)	Weight	Tube Ø
kg	160	0.16	32–35 mm
(lbs)	(353)	(0.35)	(1.26"–1.38")

Swivel coupler. Set of two clamps free to rotate 360° for connecting two tubes.



A 30 mm (1.18 in)
B 47.5 mm (1.87 in)
C ø 25 mm (0.98 in)

CLP-P437

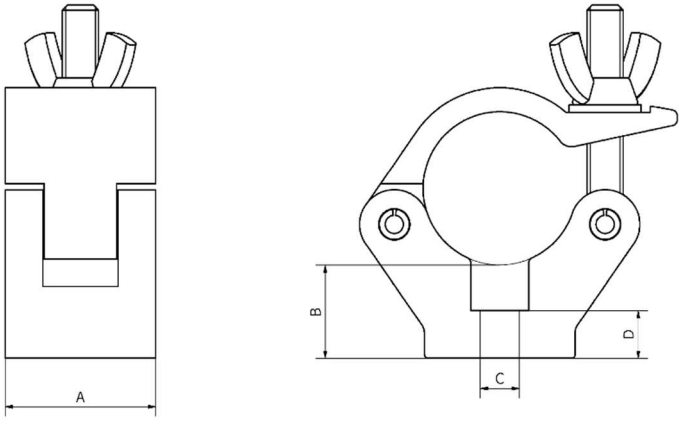
	SWL (SF 8:1)	Weight	Tube ø
kg	160	0.28	32–35 mm
(lbs)	(353)	(0.62)	(1.26"–1.38")

Clamp with lifting eye with a diameter of 25 mm (0.98 in).

6.2 5 series clamps for tube diameter 48–51 mm (1.89"–2.01")

General information:

- Designed to fit 48–51-mm (1.89"–2.01") truss tubes
- Extruded using high-tensile aluminium alloy
- Compatible with the X/H30 and 40, S36, S40, S52, S66 and S100 truss series
- Polished surface with laser engraving
- Rated with safety factor 8:1 (kg) according to DGUV 17/BGV C1
- Equipped with an M12 eye bolt and a wingnut
- Black anodised version available as standard; other colours available on request



A 50 mm (1.96 in)
B 31 mm (1.22 in)
C ø 13 mm (0.51 in)
D 16 mm (0.62 in)

CLP-P535

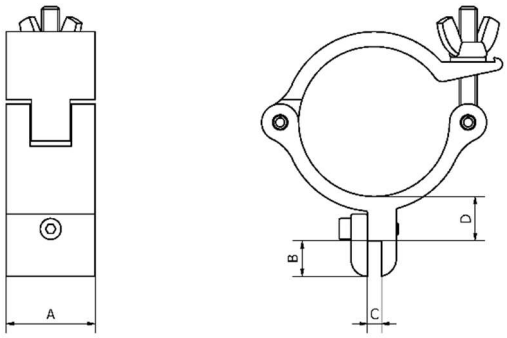
	SWL (SF 8:1)	Weight	Tube Ø
kg	650	0.28	48–51 mm
(lbs)	(1433)	(0.62)	(1.89"–2.01")

Basic clamp, can be used for most applications.

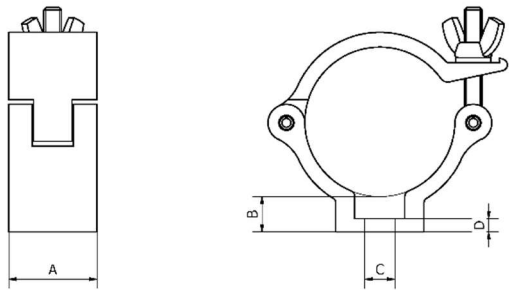
CLP-P535B (black)

	SWL (SF 8:1)	Weight	Tube Ø
kg	650	0.28	48–51 mm
(lbs)	(1433)	(0.62)	(1.89"–2.01")

Basic clamp, can be used for most applications.



A 30 mm (1.18 in)
B 12 mm (0.47 in)
C 4.8 mm (0.18 in)
D 15 mm (0.59 in)



A 30 mm (1.18 in)
B 12 mm (0.47 in)
C ø 10.2 mm (0.40 in)
D 4.5 mm (0.17 in)

CLP-P535-FPC

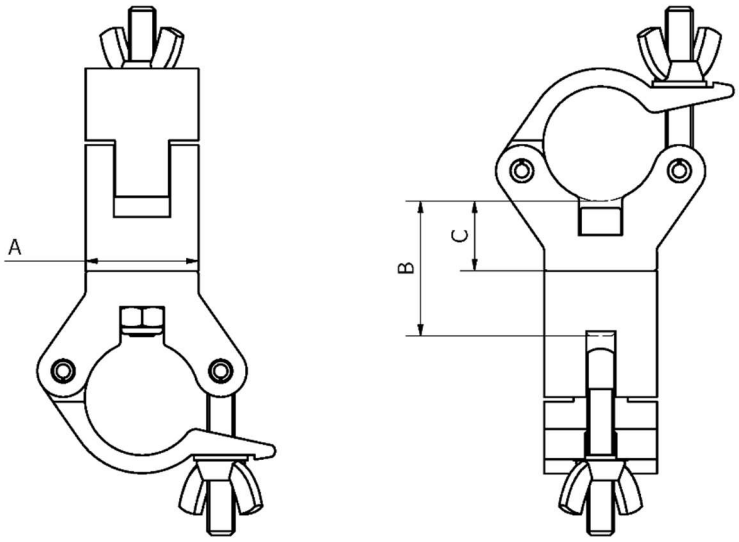
	SWL (SF 8:1)	Weight	Tube Ø
kg	55	0.22	48–51 mm
(lbs)	(121)	(0.49)	(1.89"–2.01")

Panel holder.

CLP-P535L

	SWL (SF 8:1)	Weight	Tube Ø
kg	230	0.14	48–51 mm
(lbs)	(507)	(0.31)	(1.89"–2.01")

Basic lightweight clamp.



A 50 mm (1.96 in)
B 62 mm (2.44 in)
C 31 mm (1.22 in)

CLP-P536

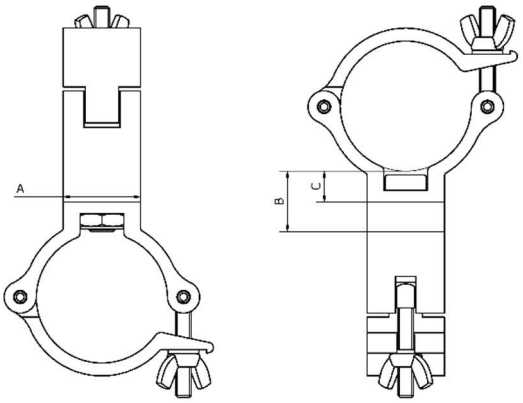
	SWL (SF 8:1)	Weight	Tube Ø
kg	540	1.34	48–51 mm
(lbs)	(1190)	(2.95)	(1.89"–2.01")

Swivel coupler. Set of two clamps free to rotate 360° for connecting two tubes.

CLP-P536B (black)

	SWL (SF 8:1)	Weight	Tube Ø
kg	540	1.34	48–51 mm
(lbs)	(1190)	(2.95)	(1.89"–2.01")

Swivel coupler. Set of two clamps free to rotate 360° for connecting two tubes.

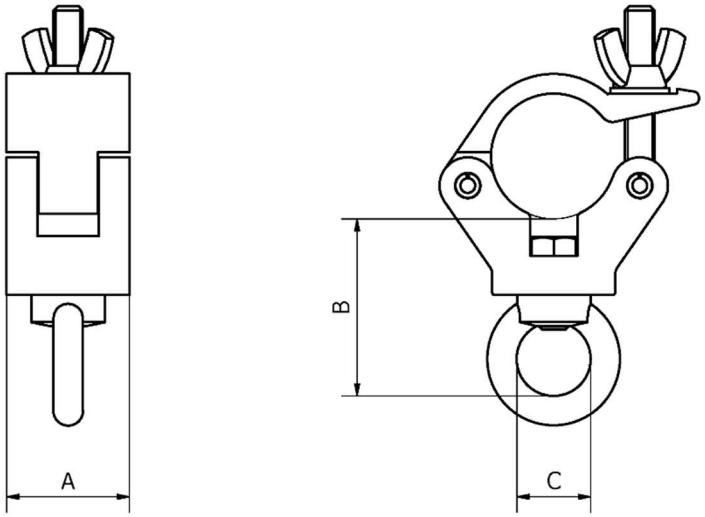


A 30 mm (1.18 in)
B 24 mm (0.94 in)
C 12 mm (0.47 in)

CLP-P536L

	SWL (SF 8:1)	Weight	Tube Ø
kg	230	0.27	48–51 mm
(lbs)	(507)	(0.60)	(1.89"–2.01")

Swivel coupler. Set of two clamps free to rotate 360° for connecting two tubes.



A 50 mm (1.96 in)
B 72 mm (2.83 in)
C ø 30 mm (1.18 in)

CLP-P537

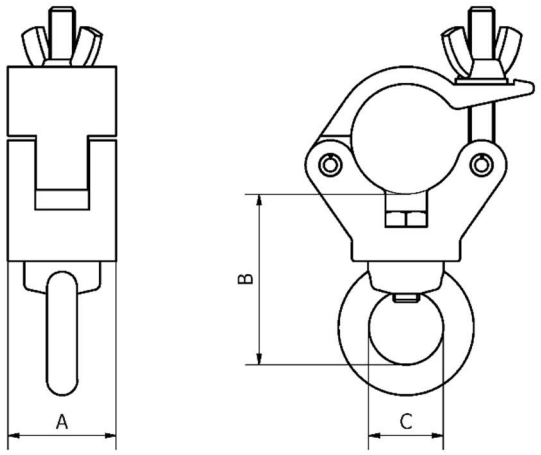
	SWL (SF 8:1)	Weight	Tube Ø
kg	170	0.83	48–51 mm
(lbs)	(374)	(1.83)	(1.89"–2.01")

Clamp with lifting eye with a diameter of 30 mm (1.18 in).

CLP-P537B (black)

	SWL (SF 8:1)	Weight	Tube Ø
kg	170	0.83	48–51 mm
(lbs)	(374)	(1.83)	(1.89"–2.01")

Clamp with lifting eye with a diameter of 30 mm (1.18 in).



A 50 mm (1.96 in)
B 79 mm (3.11 in)
C ø 34.5 mm (1.35 in)

CLP-P538

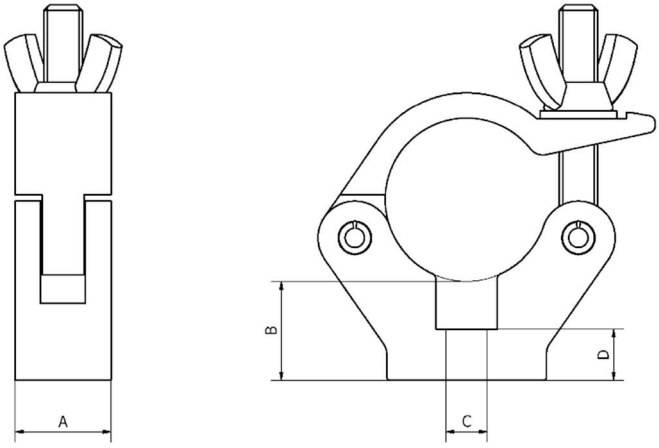
	SWL (SF 8:1)	Weight	Tube Ø
kg	750	0.41	48–51 mm
(lbs)	(1653)	(0.90)	(1.89"–2.01")

Clamp with lifting eye with a diameter of 34.5 mm (1.35 in).

CLP-P538B (black)

	SWL (SF 8:1)	Weight	Tube Ø
kg	750	0.41	48–51 mm
(lbs)	(1653)	(0.90)	(1.89"–2.01")

Clamp with lifting eye with a diameter of 34.5 mm (1.35 in).



A 30 mm (1.18 in)
B 31 mm (1.22 in)
C ø 13 mm (0.51 in)
D 16 mm (0.62 in)

CLP-P545

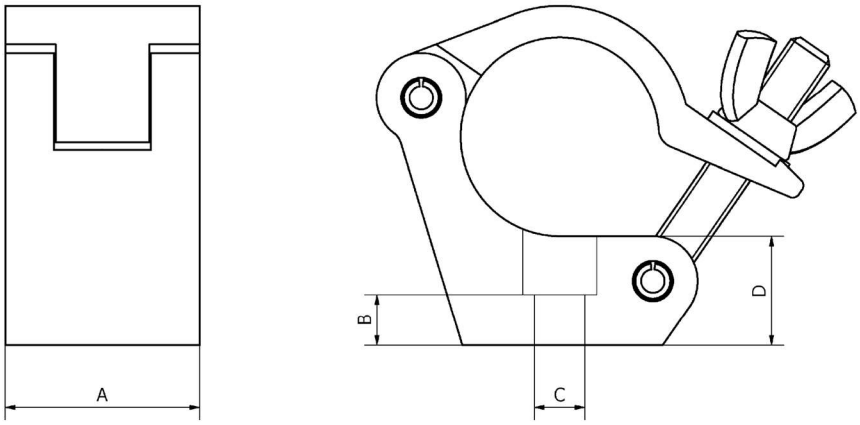
	SWL (SF 8:1)	Weight	Tube ø
kg	560	0.41	48–51 mm
(lbs)	(1234)	(0.90)	(1.89"–2.01")

Slim clamp.

CLP-P545B (black)

	SWL (SF 8:1)	Weight	Tube ø
kg	560	0.41	48–51 mm
(lbs)	(1234)	(0.90)	(1.89"–2.01")

Slim clamp.



A 50 mm (1.96 in)
B 13 mm (0.51 in)
C ø 13 mm (0.51 in)
D 28 mm (1.10 in)

CLP-P587

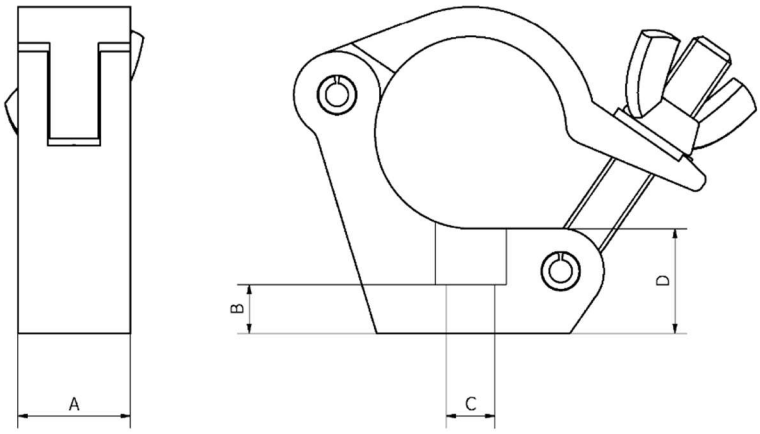
	SWL (SF 8:1)	Weight	Tube ø
kg	780	0.57	48–51 mm
(lbs)	(1719)	(1.26)	(1.89"–2.01")

Side entry clamp.

CLP-P587B (black)

	SWL (SF 8:1)	Weight	Tube ø
kg	780	0.57	48–51 mm
(lbs)	(1719)	(1.26)	(1.89"–2.01")

Side entry clamp.



A 30 mm (1.18 in)
B 13 mm (0.51 in)
C ø 13 mm (0.51 in)
D 28 mm (1.10 in)

CLP-P588

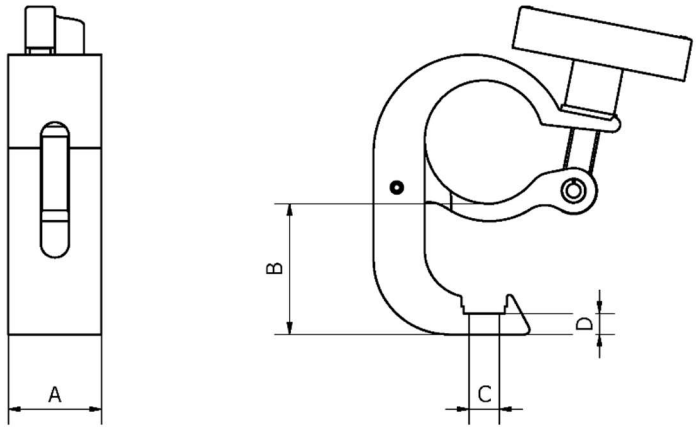
	SWL (SF 8:1)	Weight	Tube ø
kg	410	0.37	48–51 mm
(lbs)	(903)	(0.82)	(1.89"–2.01")

Slim side entry clamp.

CLP-P588B (black)

	SWL (SF 8:1)	Weight	Tube ø
kg	410	0.37	48–51 mm
(lbs)	(903)	(0.82)	(1.89"–2.01")

Slim side entry clamp.



A 40 mm (1.57 in)
B 56 mm (2.20 in)
C ø 13 mm (0.51 in)
D 9 mm (0.35 in)

CLP-P589

	SWL (SF 8:1)	Weight	Tube ø
kg	350	0.50	48–51 mm
(lbs)	(771)	(1.10)	(1.89"–2.01")

Hook clamp.

CLP-P589B (black)

	SWL (SF 8:1)	Weight	Tube ø
kg	350	0.50	48–51 mm
(lbs)	(771)	(1.10)	(1.89"–2.01")

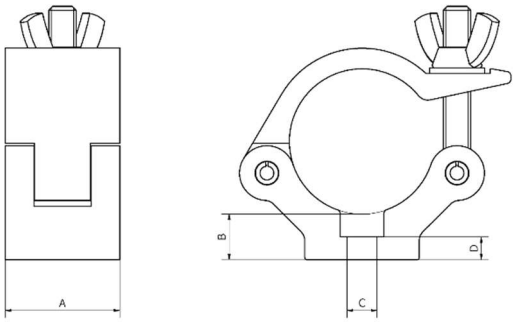
Hook clamp.

6.3 6 series clamps for tube diameter 60–63.5 mm (2.36"–2.50")

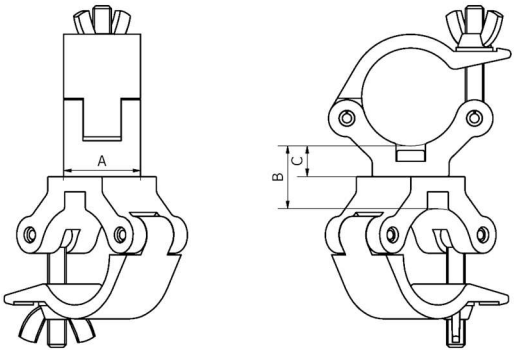
General information:

- Designed to fit 60–63.5-mm (2.36"–2.50") truss tubes
- Extruded using high-tensile aluminium alloy
- Compatible with the B100 and C52T truss series

- Polished surface with laser engraving
- Rated with safety factor 8:1 (kg) according to DGUV 17/BGV C1
- Equipped with an M12 eye bolt and a wingnut
- Black anodised version available as standard; other colours available on request



A 50 mm (1.96 in)
B 20 mm (0.78 in)
C ø 13 mm (0.51 in)
D 10 mm (0.39 in)



A 50 mm (1.96 in)
B 40 mm (1.57 in)
C 20 mm (0.78 in)

CLP-P635

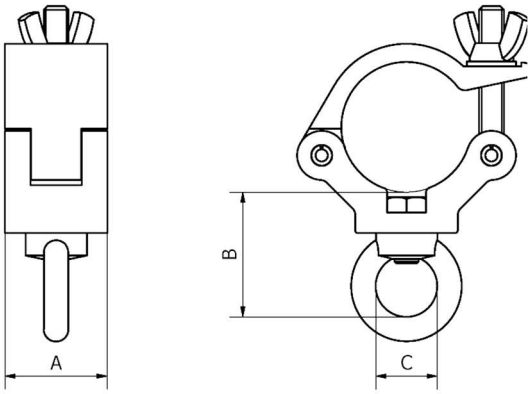
	SWL (SF 8:1)	Weight	Tube ø
kg	650	0.65	60–63.5 mm
(lbs)	(1433)	(1.43)	(2.36"–2.50")

Basic clamp, can be used for most applications.

CLP-P636

	SWL (SF 8:1)	Weight	Tube ø
kg	650	1.5	60–63.5 mm
(lbs)	(1433)	(3.31)	(2.36"–2.50")

Swivel coupler. Set of two clamps free to rotate 360° for connecting two tubes.

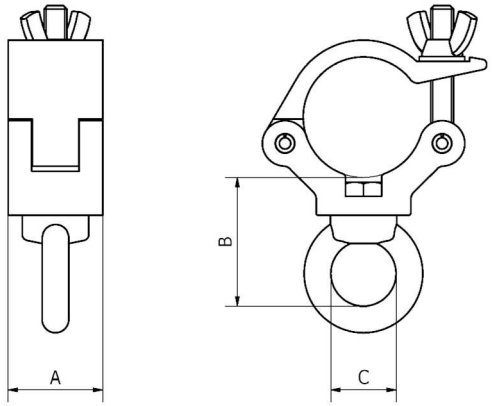


A 50 mm (1.96 in)
B 61 mm (2.40 in)
C ø 30 mm (1.18 in)

CLP-P637

	SWL (SF 8:1)	Weight	Tube ø
kg	340	1.00	60–63.5 mm
(lbs)	(749)	(2.20)	(2.36"–2.50")

Clamp with lifting eye with a diameter of 30 mm (1.18 in).

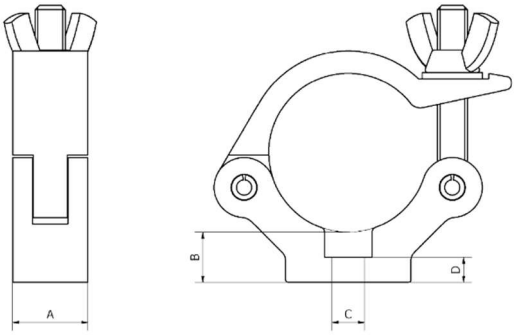


A 50 mm (1.96 in)
B 68 mm (2.67 in)
C ø 34.5 mm (1.35 in)

CLP-P638

	SWL (SF 8:1)	Weight	Tube ø
kg	650	1.00	60–63.5 mm
(lbs)	(1433)	(2.20)	(2.36"–2.50")

Clamp with lifting eye with a diameter of 34.5 mm (1.35 in).



A 30 mm (1.18 in)
B 20 mm (0.78 in)
C ø 13 mm (0.51 in)
D 10 mm (0.39 in)

CLP-P645

	SWL (SF 8:1)	Weight	Tube ø
kg	510	1.00	60–63.5 mm
(lbs)	(1124)	(2.20)	(2.36"–2.50")

Slim clamp.

7 Load capacity

For information on load capacity, see product-specific information in Section 6.

8 Coatings and surface finishes

Coatings and surface finishes should not be applied. Powder coating is not allowed. Instead, coloured versions can be ordered from PROLYTE.

Coatings and surface finishes may only be chemically removed after consulting the chemical manufacturer to ensure that the chemical will not affect the mechanical properties of the aluminium.

Abrasive blasting should not be used, because it can cause loss of material.

9 Assembling and disassembling

9.1 Safety during assembly and disassembly

A competent person or sufficiently instructed personnel under the supervision of a competent person should always assemble the product.

Before assembly, use and disassembly, the competent person's responsibilities include, but are not limited to, the following:

- Carrying out all of the instructions as described in this manual and in the specific instructions for the applicable cell clamp product.
- Instructing the people carrying out assembly and ensuring that all cell clamps and loads are attached correctly.

You are strongly advised to show people carrying out assembly or disassembly how to physically assemble and disassemble cell clamps, how to orientate connections and which tools to use.

⚠ WARNING

The product is always laser-engraved. Contact the manufacturer or its representative for corresponding information.

Do not lift people or loads above people without the following precaution:
If your loads are mainly dynamic, i.e. they move and change position, you should use self-locking nuts instead of wingnuts.

The following safety recommendations must be observed:

⚠ WARNING

- Clamps should only be used for the intended tube diameter range as specified in the catalogue or manual. If a clamp is used on tube diameters other than those specified, this will reduce the maximum load capacity.
- Do not apply loads above the maximum working load, which is engraved on the clamp.
- Make sure that the effective forces acting on the load-bearing structure have been approved by a competent person.
- All acting loads must be taken into consideration, for example dynamic forces caused by the lifting machinery.
- If loads use electrical power, equipotential bonding must be carried out.
- The choice of clamp must be adapted to the load and the tube diameter.
- When used as a lifting accessory, clamps must be inspected by a competent person as often as required, but at least once a year.
- Check the equipment each time before use. Damaged clamps must be discarded immediately if any serious damage is discovered during use.
- Repairs can only be undertaken by the manufacturer.
- Do not throw or drop clamps.

WARNING

The working loads engraved on the clamps are only valid for a straight pull between the supporting tube and the connection point on the clamp (see Section 9.6 How to apply a load and what you should avoid).

9.2 Assembling a cell clamp

The cell clamps are assembled at the manufacturer and are delivered ready to use.

9.3 Positioning and installing

- Never position a cell clamp over weld seams or pins.
- Release the wingnut to open the clamp.
- Place the clamp in the intended position. Tighten the wingnut by hand before the load is fully applied.

WARNING

Overtightening a nut or bolt can lead to permanent deformation of the tube to which the clamp is attached. It is therefore recommended not to use any mechanical tools for tightening a wingnut, but to tighten it firmly hand-tight.

9.4 Torque

See Section 3 Limitations of use.

9.5 Lifting truss assemblies

WARNING

- Before applying loads, a competent person should check whether all cell clamps are in good order and installed properly.
- Before lifting truss assemblies, check that all cell clamps are attached correctly.
- Check again after lifting 1 metre (3.3 feet). Vibrations might have loosened connections.

9.6 How to apply a load and what you should avoid

The following figure shows how to apply a load safely:

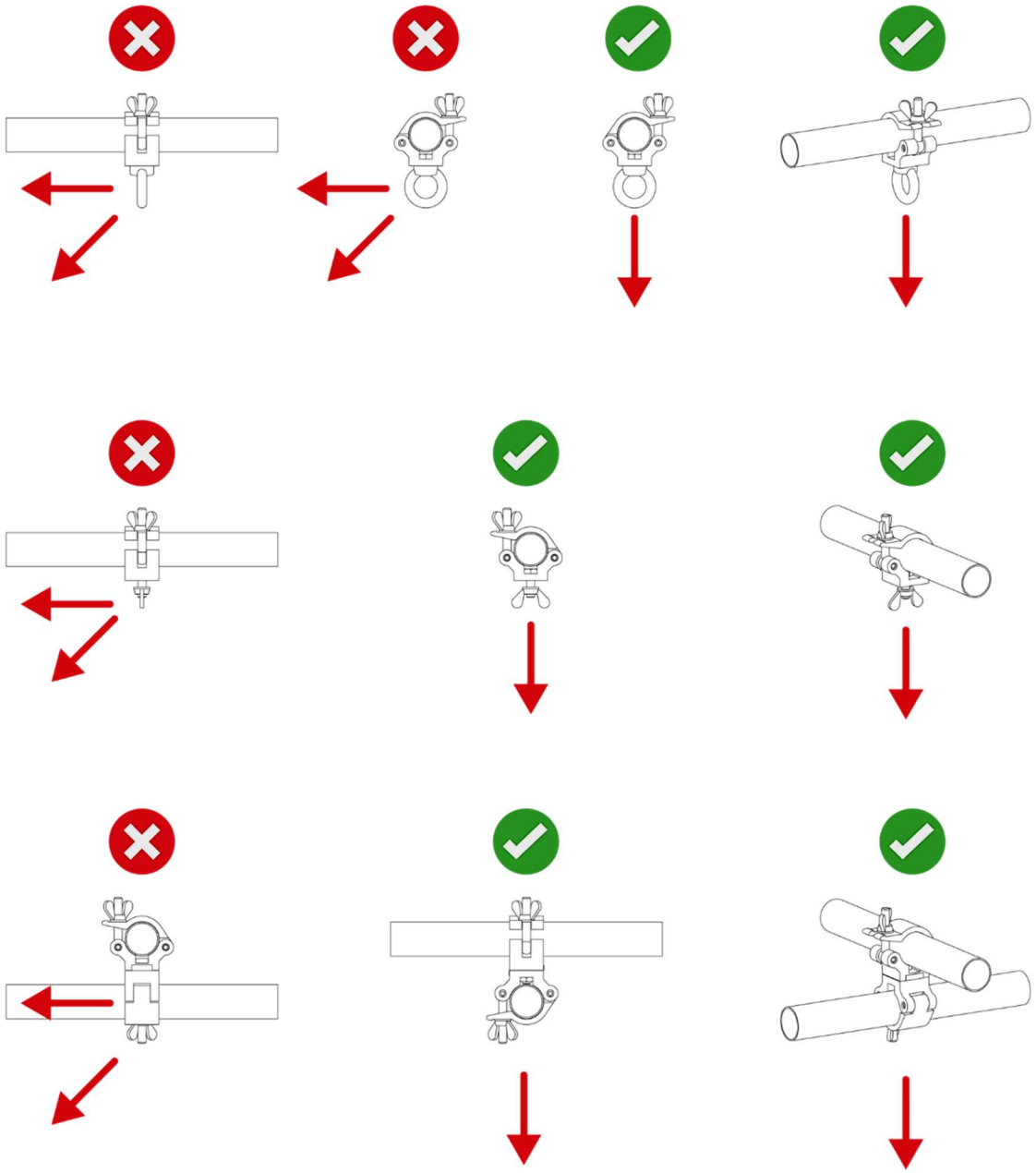


Figure 4: Applying loads to a PROLYTE cell clamp

9.7 Removing a cell clamp

1. Lower the truss to working height.
2. Detach the load or loads.
3. Inspect the clamp for any damage. Mark the clamp accordingly and discard it if necessary.
4. Lower the truss to floor level.
5. Disconnect the slings or lifting accessories.
6. Remove the cell clamps.
7. Before clamps are put into storage they must be checked for defects. To prevent defective clamps from being re-used, they should be clearly marked and separated from the usable equipment.

10 Maintenance

WARNING

Do not repair the product without first consulting the manufacturer.

If necessary, smooth the surface of coupling parts using fine sandpaper or conventional abrasive materials.

Use only hot water and soap to remove any grit or dirt from clamps. Do not use abrasive liquids to remove dirt or paint from clamps. Do not use an abrasive machine to remove sharp edges from clamps.

Although aluminium does not corrode in the same way that many steel alloys do, ambient influences can have a corrosive impact on aluminium. Take special care with cell clamps that are placed outdoors for an extended period of time, especially in areas with a high level of industrial pollution, near saltwater, near tram lines or near swimming pools. Clamps should be individually inspected each time before being used to determine whether any pollution has had a corrosive effect.

Repairs should be carried out and warranted by either the manufacturer or a suitably qualified person approved by the manufacturer.

11 Inspection

WARNING

Perform the inspections listed in this section to ensure the safe use of the product.

In case of an accident, misuse or malfunction, the product should be marked, inspected by a qualified person to establish its structural integrity for re-use and discarded if necessary.

WARNING

Do not use damaged cell clamps or related parts.

The user is responsible and liable for the safe use of the product.

For information on the discard criteria, see Section 12.

If any damage preventing the continued safe use of the product is discovered during an inspection, the product must be discarded and disposed of. In most cases, it is not enough to just identify the damage. Disposal is the only safe way of protecting others from the risks associated with damaged material.

The following checks and activities are required during inspection. This list is not exhaustive.

- Check all components for damage and corrosion. Damaged and corroded parts must be removed, disposed of and replaced.
- Check clamps for missing parts. If any parts are missing, they must be replaced.
- Burrs and sharp edges must be removed using fine sandpaper or a file.
- Maintenance and repairs must only be carried out by a competent person. If in doubt, contact the manufacturer.

11.1 Inspection levels

11.1.1 Regular inspection

A competent person must perform regular visual inspections each time before the product is used. You do not have to keep records. The regular inspection includes a visual inspection for signs of external damage and wear. If any damage is detected during the visual inspection, a qualified person must carry out a detailed inspection based on the criteria described in Section 12.

11.1.2 Periodic inspections

A qualified person must perform periodic visual inspections on behalf of the user based on the criteria described in Section 12.

11.2 Inspection frequency

11.2.1 Initial inspection

No matter whether the product is new or used when it is first purchased, inspect the product based on the criteria described in Section 12. Keep a record of the inspections.

11.2.2 Inspections after an accident, incident or malfunction

If the cell clamps have suffered any accidents, incidents or malfunctions, inspect them based on the criteria described in Section 12.

Examples of accidents, incidents or malfunctions include, but are not limited to, the following:

- Dropping a cell clamp on the floor from a height.
- Subjecting a cell clamp to shock loads.

11.2.3 Cell clamps in regular and non-regular service / permanent installations (stationary and moving)

Perform regular inspections each time before the product is used and periodic inspections at least once a year.

Perform periodic inspections on all cell clamps that are permanently installed in a stationary configuration. A qualified person must determine the frequency of the inspections based on the conditions in the location of use.

Perform periodic inspections on all cell clamps that are permanently installed in a configuration in which movement of the cell clamps is an integral part of their use. Periodic inspections must be carried out every three months or as specified in an inspection plan determined by a qualified person.

11.3 Records

The owner must keep records of initial and periodic inspections. These records should be signed and dated by the person carrying out the inspections.

12 Discard criteria

All discard criteria must be taken into consideration when performing inspections.

Discard criteria can include the following:

- Nuts that cannot be tightened or loosened by hand.

- Eye bolts that do not rotate correctly.
- Damaged eye bolt threads.
- Lids that do not open or close correctly.
- Deformation of the clamps and their components, such as the lid.

12.1 General criteria

All parts of the clamps must be checked as regards the following criteria:

Criterion	Failure symptoms
Holes	• The product contains any holes that have not been made by the manufacturer.
Deformation	• The opening of the lid legs has changed by more than 1 mm (0.04"). • The end of one leg is raised by more than 1 mm (0.04") compared to the other leg. • The inner radius is 5% bigger or smaller than that of the product when in new condition.
Excessive wear / corrosion	• Loss of material that reduces the thickness of the clamp body by more than 25% or its cross-section by more than 10%.
Cracks	• Cracks of any kind or any size.

13 Warranty

For a period of 24 months, we undertake to repair any damage attributable to faulty materials or workmanship free of charge provided that the product is forwarded freight paid to our factory or one of our contract service organisations.

The warranty period begins on the date of delivery, proved by a purchase receipt such as an invoice, a delivery note or a copy of one of these.

The warranty is applicable to new products only.

The warranty does not cover damage due to transport, negligent handling, overloading or parts subject to normal wear and tear. Nor does it cover damage resulting from misuse due to non-observance of the instructions in this manual.

The fitting of replacement parts not supplied by us or modifications of our design by third parties also invalidate the warranty.

Warranty repairs do not renew or extend the warranty period.

Contact details:
Prolyte B.V.
Industriepark 9
9351 PA Leek
The Netherlands
T +31 594 85 15 15
sales@prolyte.com

Area Four Industries

www.prolyte.com