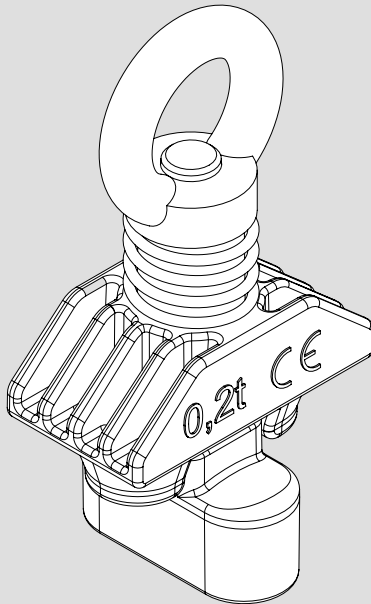


Crane Eye DUO

Item No. 128296

Translation of the Original Instructions for Use

CE



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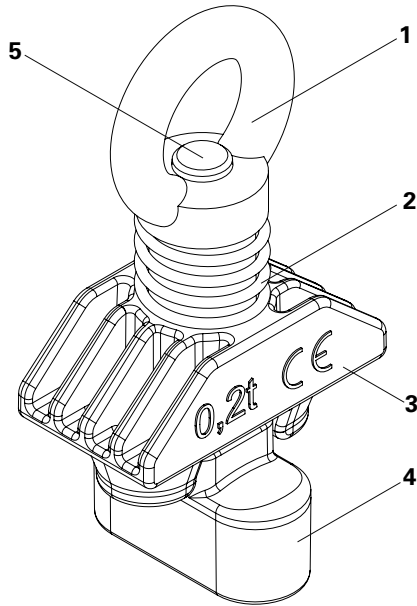
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Overview



- (1) Ring Nut M16
- (2) Crane Eye Spring DUO
- (3) Crane Eye Head Piece DUO
- (4) Crane Eye Base Part DUO
- (5) Cylinder Bolt M16 x 110

Key



Safety Instructions



Tip



Note



Visual Check



Load-bearing point



Safety helmet



Safety shoes



Safety gloves



Safety glasses

Dimension specifications

Dimensions are usually given in mm. Other units of measure, e.g. cm, are shown in the illustrations.

Conventions

- Instructions are numbered with: 1..... , 2..... , 3.....
- The result of an instruction is shown by: →
- Position numbers are clearly provided for the individual components and are given in the drawing, e.g. **1**, in the text in brackets, for example, (1).
- Multiple position numbers, i.e. alternative components, are represented with a slash, e.g. **1/2**.

Arrows

→ Arrow representing an action

Safety Instructions

The safety instructions alert site personnel to the risks involved and provide information on how to avoid these risks.

Safety instructions are featured at the beginning of the section ahead of the instructions.

Safety instructions which must always be followed are described as follows:



Danger

This sign provides warning of an extremely dangerous situation whereby failure to observe the danger notice will result in a person's death or serious and irreversible injury.



Warning

This sign provides warning of a dangerous situation whereby failure to observe the danger notice will result in a person's death or serious and irreversible injury.



Caution

This sign provides warning of a dangerous situation whereby failure to observe the danger notice will result in a slight and irreversible injury.



This sign provides warning of situations whereby failure to observe the information will result in material damage.

Safety Instructions

General

When using PERI load-carrying equipment, the Instructions for Use and markings are to be complied with at all times!

For the application and inspection of our products, the current safety regulations and guidelines in the respective countries where they are being used must be observed at all times.

The contractor must ensure that the Instructions for Use provided by PERI are available at all times for the users and that they are fully understood!

The contractor can only assign those persons to independently use load-carrying equipment who are actually familiar with the task!

PERI load-carrying equipment is to be used accordingly so that persons are never put at risk in any way!

The maximum bearing capacity of PERI load-carrying equipment must not be exceeded!

All persons using the load-carrying equipment must check the equipment during use for obvious defects (e.g. deformations, cracks, breaks, incomplete markings)!

Do not use damaged load-carrying equipment!

PERI load-carrying equipment must not be used if the markings are missing or illegible!

The contractor must ensure that the personal protective equipment required for the assembly, modification or dismantling of the system is available and used as intended.

Safety Instructions

Product-specific

The Crane Eye DUO must not come into contact with oil of any kind nor aggressive substances. This would otherwise affect the material of the Crane Eye DUO and make it unusable! No longer use the Crane Eye DUO! Correctly dispose of the Crane Eye DUO!

The person who attaches the load to the load-carrying equipment must be sufficiently secured against falling. In all cases, the load must be secured against tipping over and sliding!

Move loads only during safe wind conditions. Observe storm warnings! Depending on the type of load and the surface area subjected to the wind, the decision whether sufficient safety measures are in place when moving the load is taken on the jobsite.

The lifting equipment attached to the Crane Eye DUO must be fitted with a hook safety device.

The operator may begin to move the load only if he is completely satisfied that the load has been correctly attached.

Ensure loads are evenly balanced when being picked up! Loads must be sufficiently stable both in their form and position so that the load does not move during transportation!

Ensure that the load is in a safe and secure position before releasing the load-carrying equipment!

Always lift up or set down loads smoothly without any jerking!

Before moving, remove or secure any loose components!

Persons are not allowed to remain under the load being lifted!

Transporting persons on the load is prohibited!

Ensure that the lifting gear, such as steel wire ropes and chains, is not knotted or twisted! Do not wrap the lifting chains of the load-carrying equipment around the load to be transported nor stretch over sharp edges! Twisted chains must be straightened!

For a better understanding, detailed illustrations are partly incomplete. The safety installations which have possibly not been featured in these detailed drawings must nevertheless be available.

Intended Use

PERI products have been designed for exclusive use in the industrial and commercial sectors only by suitably trained personnel!

The Crane Eye DUO is classified as load-lifting equipment which is used as a load-bearing point for accommodating tensile forces.

- Wall Formwork DUO
- Column Formwork DUO

The Crane eye DUO is not used in continuous operations and, after being mounted, becomes an integral part of the load.

The Crane Eye DUO may only be permanently attached to specifically designated points. Details on the mounting and position are provided in the accompanying set of assembly instructions.

Only one sling of the lifting gear may be attached to the Crane Eye DUO.

The Crane Eye DUO is not permitted to transport persons.

These Instructions for Use contain information for ensuring proper handling and correct application, inspection and maintenance.

The product described here corresponds to the relevant provisions and regulations of EU Machinery Directive 2006/42/EC.

These Instructions for Use provide the basis for the risk assessment. The risk assessment shall be compiled by the contractor. The Instructions for Use do not replace the risk assessment!

The Crane Eye DUO may only be used:

1. Within the permissible load-bearing capacity.
2. Within the permissible temperature limits of -20 °C to +60 °C.
3. When in faultless condition.
4. If correctly mounted.
5. With a permissible load-bearing capacity per crane eye ≤ 0.2 t (200 kg).

Instructions for Use

The use in a way not intended or deviating from the intended use according to the Instructions for Assembly and Use represents a misapplication with a potential safety risk.

Changes to PERI components are not permitted.

Only PERI original components may be used. The use of other products and spare parts represents a misapplication with associated safety risks.

Operations using a damaged Crane Eye DUO is not permitted.

Lifting operations can only commence if it has been ensured that the load is properly connected to the lifting equipment.

Target Groups

Contractors

These Instructions for Use are intended for contractors who

- assemble, modify and dismantle the formwork system, or use
- e.g. for concreting or
- for other operations, e.g. carpentry or electrical work.

Construction site coordinator

The Safety and Health Protection Coordinator*

- is appointed by the client,
- must identify potential hazards during the planning phase,
- determines measures that provide protection against risks,
- creates a safety and health plan,
- coordinates the protective measures for the contractor and site personnel so that they do not endanger each other,
- monitors and ensures compliance with the protective measures.

Qualified and competent personnel

Due to the specialist knowledge gained from professional training, work experience and recent professional activity, the qualified person has a reliable understanding of safety-related issues and can correctly carry out tests. Depending on the complexity of the test to be undertaken, e.g. scope of testing, type of testing or the use of a certain measuring device, a range of specialist knowledge is necessary.

* Valid in Germany: Regulations for Occupational Health and Safety on Construction Sites 30 (RAB 30)

Qualified specialists

Formwork systems may only be assembled, modified or dismantled by personnel who are suitably qualified to do so. For the work to be carried out, the qualified workers must have received instructions** which contain at least the following points:

- An explanation of the plan for the assembly, modification or dismantling of the formwork system in an understandable form and in the language of the user.
- Description of measures in order to safely assemble, modify or dismantle the formwork system.
- Designation of the preventive measures to avoid the risk of persons and objects falling.
- Designation of the safety precautions in the event of changing weather conditions which could adversely affect the safety of the formwork system concerned as well as the personnel.
- Details regarding the permissible loads.
- Description of any other risks that are associated with the assembly, modification or dismantling procedures.

** Instructions are given by the contractor himself or a qualified and competent person selected by him.



In other countries, ensure that the relevant national guidelines and regulations in the respective current version are complied with!

Storage and transportation

Store and transport the load-carrying equipment so it cannot unintentionally change its position or be damaged in any way.

Do not drop the load-carrying equipment.

During the moving procedure with the crane, ensure that components are picked up and set down so that any unintentional falling over, falling apart, sliding, falling to the ground or rolling is avoided.

Do not place any loads on the load-carrying equipment.

Use original PERI storage and transport systems, e.g. crate pallets.

Store in a dry, clean and corrosion-protected condition at temperatures from -20°C to $+60^{\circ}\text{C}$.

PERI load-carrying equipment must be correctly stored protected from the weather, oil of any kind or corrosive materials, provided that safety is not compromised!

During transport, intermediate storage or when remaining suspended on the load, ensure that it remains free of dirt and that its functionality is not affected.

Additional technical documentation

- Poster
 - DUO
- Instructions for Assembly and Use
 - DUO Lightweight Hand Formwork system
- Instructions for Use:
 - Crane Eye DUO
 - Pallets and Stacking Devices
- Brochure:
 - DUO

Care and maintenance instructions

The load-carrying equipment has been designed for long-term use on construction sites.

In order to ensure economical, technical and safe use over the long term, attention must be paid that the equipment is handled carefully at all times.

Identification markings

Crane Eye DUO marking



Danger

- **Do not use if the marking is missing or illegible!**
- **Must not come into contact with oil of any kind nor aggressive substances. This would otherwise affect the material of the Crane Eye DUO and make it unusable! No longer use the Crane Eye DUO! Correctly dispose of the Crane Eye DUO!**

1a Permissible load-bearing capacity (Fig. 1)

1b CE marking (Fig. 1)

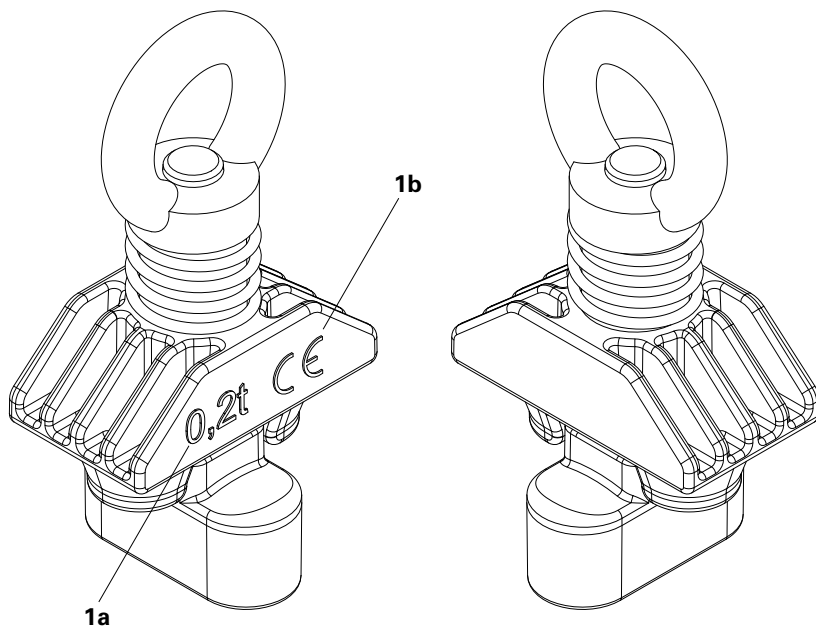


Fig. 1

Inspections

1. General

The procedure described in this section is based on the current German regulations for testing and inspections. The points listed form the minimum requirements for the inspection.

The respective regulations of the individual states and countries where this product is used must be taken into account.

If no country-specific regulations are available, it is recommended to proceed according to German rules and regulations.

The contractor is responsible for determining the type, scope and intervals for the required tests relating to the provision of the load-carrying equipment. As a result of these checks, any safety-related defects are to be systematically identified and remedied.

2. Purpose

Due to the check carried out before the initial operations as well as regularly recurring inspections of the load-carrying equipment, it can be ensured that operational and functional reliability is guaranteed.

3. Responsibility

The contractor must ensure that the load-carrying equipment is put into operation only if it has been inspected by a qualified person.

4. Inspection

4.1 Safety check

It must be verified whether all defects have been rectified or non-functioning products have been replaced.

4.2 Implementing the inspection

The inspection includes a visual and functional check:

- Deformation, wear and lengthening of the components.
- The Crane Eye DUO may no longer be used if there is a geometric deviation of more than 3% from the original material diameter. (Fig. 2)
- Mechanical damage.
- Availability of all components.
- Cracks, bending, flattening, notches on components.
- Only original PERI components may be used.
- Indications of impermissible heating or contact with fire.
- Markings must be legible.

4.3 Functional check

- Movability of the Crane Eye DUO.
- Check the Crane Eye Spring DUO (2).
The Crane Eye Head Part DUO (3) must assume its initial position through the spring force.
(Fig. 2)

Implementation of anything beyond the usual scope of inspection is subject to the discretion of the competent person and can extend to additional checks.

Inspections

4.4 Measures

If defects are discovered during the safety check, do not use the Crane Eye DUO! Correctly dispose of the Crane Eye DUO!

4.5 Inspection before starting work operations

- Check to ensure that the load-bearing capacity of the Crane Eye DUO (0.2t) is sufficient for the weight of the load.
- Check Crane Eye DUO for any defects.
- Attach lifting equipment.
- Firstly, lift and lower the load only a short distance from the ground, then set down and relieve load.

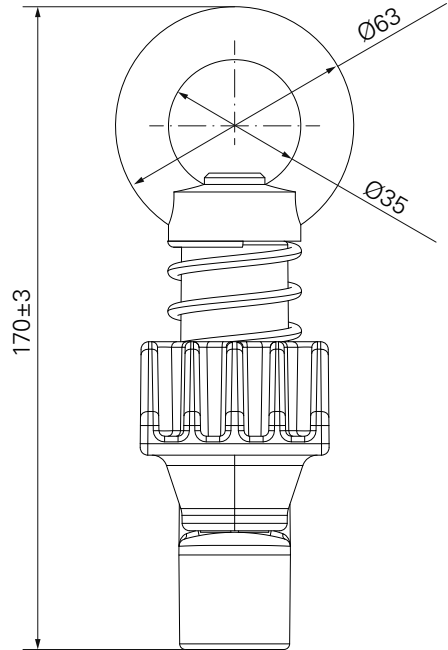
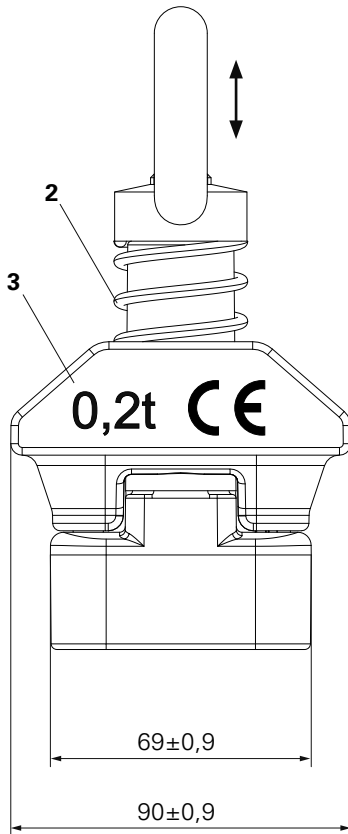


Fig. 2



Danger

- The load-bearing capacity of the Crane Eye DUO must not be exceeded!
- The Crane Eye DUO is not designed for transporting site personnel!
- Do not stand under suspended loads!

Load Factor: 4

(According to DIN 13155 = ratio of the breaking load to the permissible load-bearing capacity).

Crane sling angle	Load-bearing capacity F1
$\beta_1 \leq 30^\circ$	0,2 t 2kN
$\beta_2 \leq 5^\circ$	

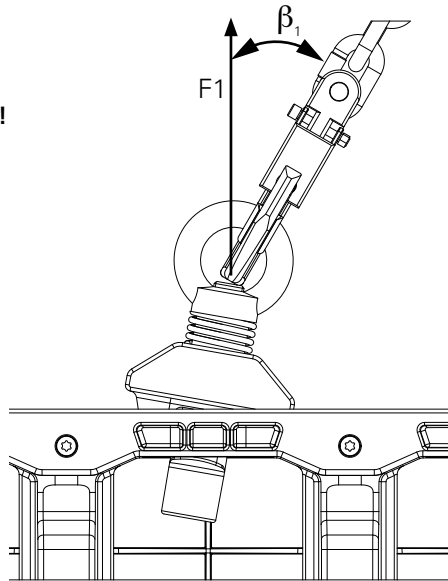


Fig. 3



Before attaching

The Crane Eye DUO must be mounted as described in the Assembly section. Only one sling of the lifting gear may be attached to each Crane Eye DUO.

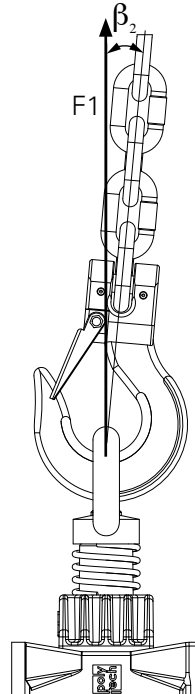


Fig. 4

Attaching



Danger

For transporting the respective system, only lifting gear with chains of sufficient length, load-bearing capacity and securing mechanism (S) may be used!

Attach Hook (H) of the lifting gear in the upper hole (1) of the Crane Eye DUO and close. (Fig. 5)

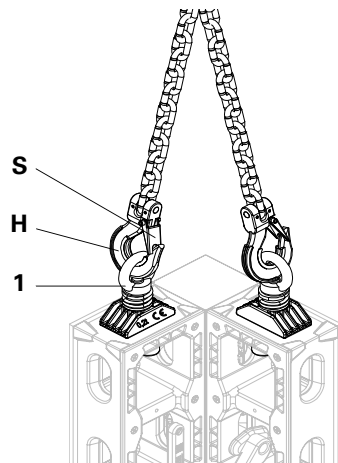


Fig. 5

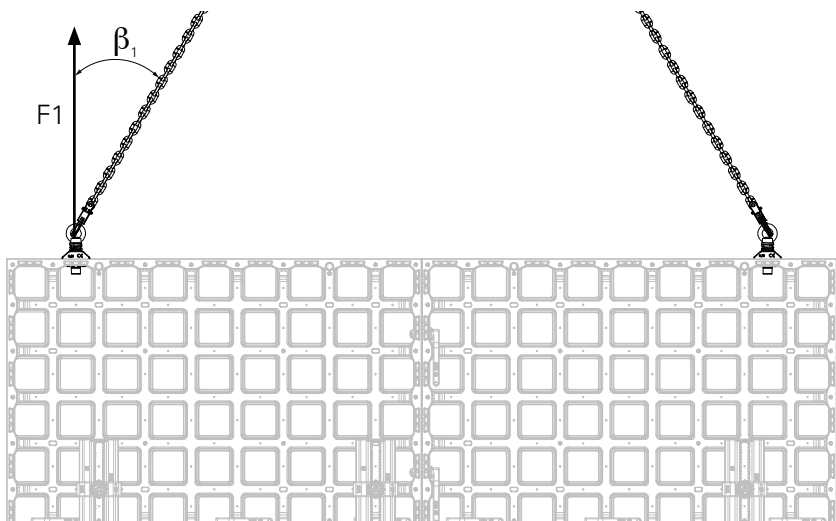


Fig. 6

Assembly



Warning

Risk of injury from falling components!

- Only PERI original components may be used!
- Before initial operations, check whether the Crane Eye DUO is undamaged and functional!

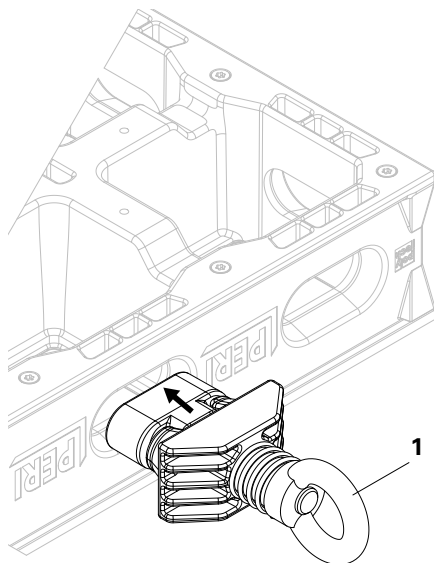


Fig. 6

1. Mount Crane Eye DUO (1) to the horizontal element. (Fig. 6)
2. Position Crane Eye DUO in the slotted hole of the panel. (Fig. 6)
3. Press down Crane Eye DUO and turn 90°. (Fig. 7)
 - Crane Eye is in position. (Fig. 8)
 - Spring force clamps the Crane Eye DUO in a safe position on the panel. (Fig. 9)

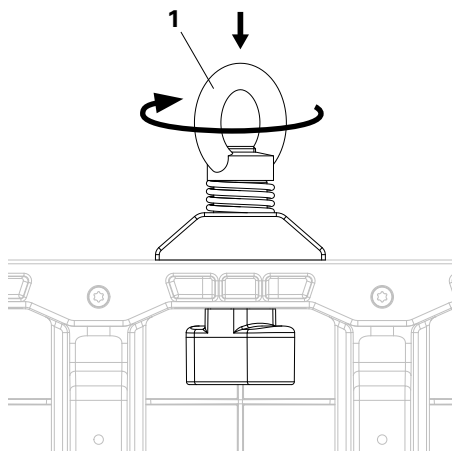


Fig. 7

Assembly



The procedure described here is an exemplary presentation and is applicable for all systems of the Crane Eye DUO. Take into account the correct installation situation of different assembly versions! See Instructions for Assembly and Use DUO.

After assembling the Crane Eye DUO, this becomes an integral part of the load. The Crane Eye DUO remains attached to the element after being moved with the crane. (Fig. 9)



Check the connection of the Crane Eye DUO:

- dimensionally stable,
- components are undamaged,
- there are no missing components,
- attachment point on the panel is in order.

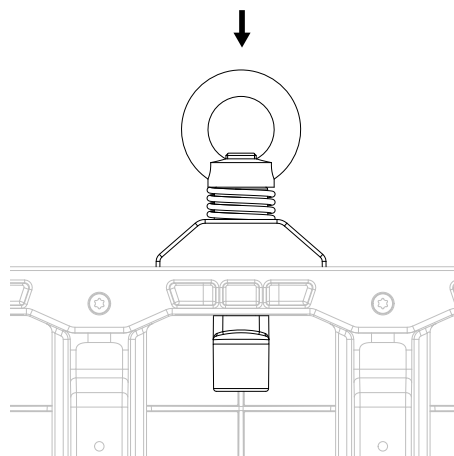


Fig. 8

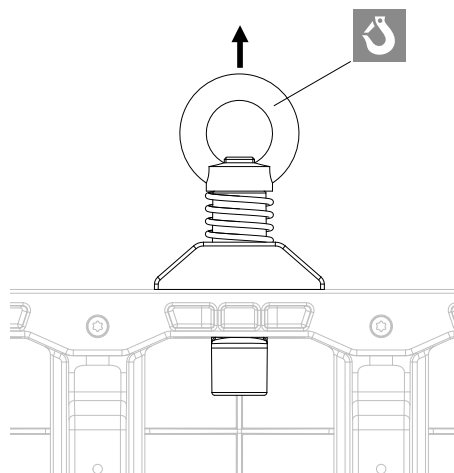


Fig. 9

Transport of load



Danger

Risk of injury from falling components!



Before lifting



Important

- Carefully tension the lifting gear!
- Ensure lifting is carried out smoothly (no jerking)!
- Lifting operations may only be started when it has been ensured that the load has been correctly attached.

During transportation



Warning

- Do not stand under suspended loads!
- Do not transport persons!
- Do not transport any loose parts or other loads!
- Ensure uniform load distribution!



Carefully lift the load and move into position on the next wall section by means of a guide rope.

Setting down the load



Important

Risk of injury through tilting components!

- Never set the load down abruptly!
- Never set down load on obstacles!
- Never set down load on uneven surfaces!
- Only set the load down on sufficiently load-bearing surfaces!

Dismantling



Danger

Dismantling work must not be carried out on a suspended load! The load must be secured against tipping, rotating or sliding!



1. Disassemble the Crane Eye DUO (1) on the horizontal element. (Fig. 10/ Fig. 11)
1. Press down Crane Eye DUO (1) and turn 90°. (Fig. 10)
2. Pull Crane Eye DUO (1) out of the slotted hole of the panel. (Fig. 11)

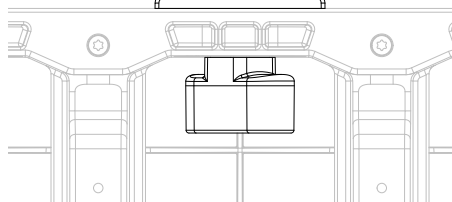
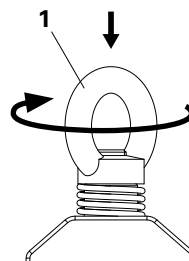


Fig. 10

Disposal



Warning

Risk of injury! Spring (2) of the Crane Eye DUO is installed with a high preload.

- Release Ring Nut (1) slowly and very carefully!
- Wear personal protective equipment.



If an authorized person determines that the Crane Eye DUO is no longer suitable for use:

- Correctly dispose of the Crane Eye DUO. It may no longer be used.
- The materials are to be separated according to type and then properly disposed of.

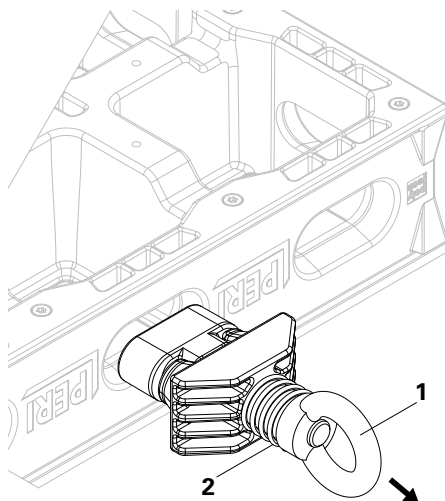


Fig. 11

- The materials are to be disposed of according to local regulations and guidelines.

Item no.	Weight kg
128296	0.652

Crane Eye DUO

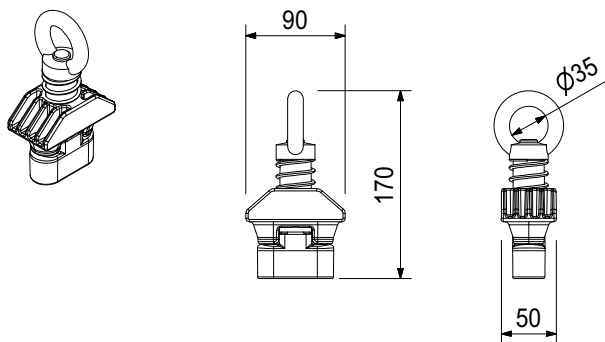
For moving DUO panels.

Note

Follow Instructions for Use!

Technical Data

Permissible load-bearing capacity 0.2 t.



EG – Konformitätserklärung im Sinne der EG-Richtlinie 2006/42/EG Anhang II, 1.A

In der Gemeinschaft ansässige Person, die bevollmächtigt ist, die technischen Unterlagen zusammenzustellen:

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PERI GmbH
Rudolf-Diesel-Straße 19
89259 Weißenhorn

Beschreibung und Identifizierung:

Produktgruppe: Wandschalung
Typ: Lastaufnahmemittel
Artikel-Nr.: 128296
Handels-Bez.: Kranöse DUO

Es wird ausdrücklich erklärt, dass dieses Produkt allen einschlägigen Bestimmungen der folgenden EG-Richtlinien entspricht:

EG Maschinenrichtlinie 2006/42/EG

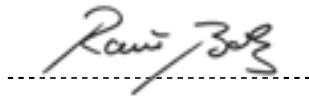
Fundstelle der angewandten harmonisierten Normen entsprechend Artikel 7 Absatz 2:

EN 13155 : 2009-08
EN 12100 : 2011-03

Weißenhorn, 29.08.2015

Hersteller

PERI GmbH
Postfach 1264
89259 Weißenhorn



Leitung Produktentwicklung

Dipl.-Ing. Rainer Bolz
PERI GmbH

This document is a translation into
English from the German original.

EC – declaration of conformity according to the **EC-Machinery Directive 2006/42/EC** **Annex II, 1.A**

Person residing within the Community authorised to compile the relevant technical documentation:

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Description and identification:

Product Group:	Wall Formwork
Typ:	Lifting Accessory
Article-No.:	128296
Commercial Designation:	Crane Eye DUO

It is expressly declared that this product full fills all relevant provisions of the following EU Directives:

European Directive On Machinery 2006/42/EC

Reference to the harmonised standards used, as referred to in Article 7 Annex 2:

EN 13155 : 2009 - 08
EN 12100 : 2011 - 03

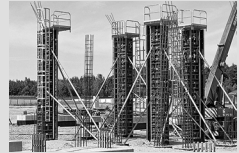
Weissenhorn, 29.08.2015

Manufacturer
PERI GmbH
Postfach 1264
89259 Weissenhorn

The optimal System for every Project and every Requirement



Wall Formwork



Column Formwork



Slab Formwork



Climbing Systems



Tunnel Formwork



Bridge Formwork



Shoring Systems



Construction Scaffold



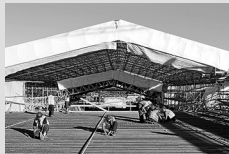
Facade Scaffold



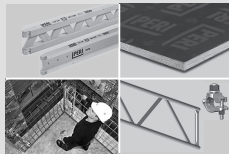
Industrial Scaffold



Access



Protection Scaffold



System-Independent Accessories



Services



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