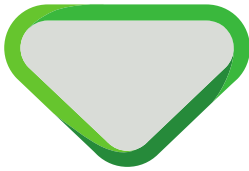


Report EU-type examination

Report belonging to EU-type examination certificate number	: NL16-400-1002-142-07
Date of issue of original certificate	: 2016-06-23
Certificate applies to	: Safety component
Revision number / date	: 3 / 2025-12-17
Assessment basis	: Lifts Directive 2014/33/EU Standards: EN 81-20:2020 Clause 5.8 EN 81-50:2020 Clause 5.5
Project number	: PR001199

1. General specifications

Description of the product	: Energy accumulation buffers with nonlinear characteristics
Trademark	: ETN
Type no.	: EN13
Name and address of the manufacturer	: Pleiger Kunststoff GmbH & Co. KG Im Hammertal 51 D-58456 Witten, Germany
Laboratory	: None
Address of examined safety component	: Liftinstituut, Alphen aan den Rijn, The Netherlands, Im Hammertal 51, D-58456 Witten, Germany
Date of examination	: 2025-11-28
Examination performed by	: Povilas Kazimieras Gvildys



2. Description safety component

The Energy accumulation buffers with nonlinear characteristics EN13 from ETN is produced by Pleiger Kunststoff are made of Polyurethane. The buffer tested is a buffer with a height of 84 mm and a diameter of 125 mm. The buffer is fixed to a steel plate. The data plate information is provided on a ring fixed into the groove of the buffer.

See annex 1 for a general overview of the product.

3. Examinations and tests

The examination covered a check whether compliance with the Lifts Directive 2014/33/EU is met, if possible, based on the harmonized product standards EN 81-20 clause 5.8 and EN 81-50 clause 5.5.

The examination included:

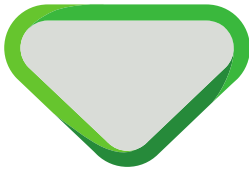
- Examination of the technical file (See annex 2).
- Examination of the representative model in order to establish conformity with the technical file.
- Free fall tests to check compliance with the requirements.
- A static compression curve.

4. Results

After the final examination the product and the technical file were found in accordance with the requirements. The functional tests passed without remarks.

The load tests passed without remarks and did not lead to permanent deformations or loss of stability.

For detailed test results see Test report belonging to EU type-examination certificate no. : NL16-400-1002-142-07.



5. Conditions

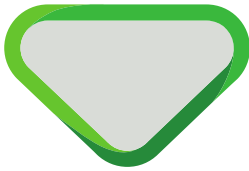
Additional to or in deviation of the applicable demands in the considered requirements / standards (see certificate and/or page 1 of this report), the following conditions shall be taken into account:

- | | |
|--|---------------|
| – Load range for a rated speed of 1.0 m/s: | 700 – 2250 kg |
| – Temperature range material: | -40°C – 80°C |
| – Nominal temperature range: | +5°C – 40 °C |
| – Humidity range | 0% - 70% |
| – Minimum life time | 5 years |

6. Conclusions

Based upon the results of the EU-type examination Liftinstituut B.V. issues an EU-type examination certificate.

The EU-type examination certificate is only valid for products which are in conformity with the same specifications as the type-certified product. The certificate is issued based on the requirements that are valid at the date of issue. In case of changes of the product specifications, changes in the requirements or changes in the state of the art the certificate holder shall request Liftinstituut B.V. to reconsider the validity of the certificate.



liftinstituut
SINCE 1933



7. CE marking and EU Declaration of conformity

Every safety component that is placed on the market in complete conformity with the examined type must be provided with a CE marking according to article 18 of the Lifts Directive 2014/33/EU under consideration that conformity with eventually other applicable Directives is proven. Also, every safety component must be accompanied by an EU declaration of conformity according to annex II of the Directive in which the name, address, and Notified Body identification number of Liftinstituut B.V. must be included as well as the number of the EU-type examination certificate.

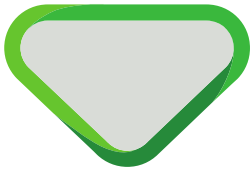
An EU-type certified safety component shall be random checked e.g. according to annex IX of the Lifts Directive 2014/33/EU before these safety components may be CE-marked and may be placed on the market. For further information see regulation 2.0.1 'Regulations for product certification' on www.liftinstituut.com.

Prepared by:

Povilas Kazimieras Gvildys
Product Specialist Certification

Authorised by:

P.J. Schaareman
Product Manager C&S



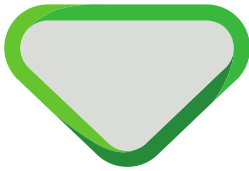
Annexes

Annex 1. General overview of the product

Befestigungsplatte / Form	Befestigungsart
	eingeschäumt / verklebt
	verklebt
	verklebt

Maßstab 1 : 2	
Artikel-Nr. 320213 (-X)	
Aufsetzpuffer EN13	
ø 125 x 84 mm	
Blatt	Zeichnung-Nr. 16-061
Blätter	Ersatz für:

Elastomer-Technik Nürnberg GmbH			
An der Kaufleite 20		Datum	Name
D-90562 Kalchreuth		Bearb. 12.04.2016	Landkammer
a	Platte eingeschäumt	La	Gepr.
b	Toleranzklasse geändert	Ho	Norm
		Toleranzklasse ISO 3302-1 M4	
		Nicht bemalte Kanten -0.5 x 45°	
Zust.	Änderung	Datum	Name
		Ursprung	
		Ersatz durch:	



Annex 2. Documents of the Technical File which were subject of the examination

Title	Document number	Date
User Manual	-	2008-03-07
Drawing	16-061	2016-06-23
Pleiger Statement		2015-08-12
Druckprüfung an Kunststoffpuffern EN13	Protokoll Nr. PRCS006488	2020-11-30
Drawing	16-061	2025-12-09

Annex 3. Reviewed deviations from the standards

EN xx-x par.	Requirement	Accepted design
x.x.x		

Annex 4. Revision of the certificate and its report

Rev.:	Date	Summary of revision
-	2016-06-23	Original issue
1	2016-08-15	Height of buffer changed into 84 mm
2	2020-12-07	Extended certificate period of 5 years
3	2025-12-17	Extended certificate period of 5 years Update the standard New drawing

--- End of report ---

EU-Declaration of Conformity for ETN-lift buffers

Subject: ETN-lift buffers
Dimensions and load ranges see table, page 2

Materials:

ETN-lift buffer ETN®- Cell-PU
Mounting plates Steel

We hereby declare that the construction conforms to the relevant regulations of the

***lift buffer attachments with non-linear characteristic
lift directive 2014/33/EU***

Harmonised standards used:

***EN 81-20:2020 Clause 5.8
EN 81-50:2020 Clause 5.5***

Nominated test centre for the execution of EU type examination test:

***LIFTINSTITUUT B.V.
Buikslotermeerplein 381
NL-1025 XE Amsterdam
Notified body: 0400***

EU type examination test certificate No.:

see table, page 2

Production monitoring by:

***LIFTINSTITUUT B.V.
Buikslotermeerplein 381
NL-1025 XE Amsterdam
Notified body: 0400***

Year of manufacture of buffer attachment:

2025

Management:

17/12/2025
Date



Christoph Schaaque
Signature

EU type examination for ETN-lift buffer

The type examination tests for **ETN**[®]-lift buffers made from **Cell-PU** have been carried out in accordance with lift directive **2014/33/EU**. The **certificate number** records the permissible load ranges for every type of lift buffer. An **EU type examination test certificate** can be issued for every type of lift buffer on request.

min./max. load of range [kg] – nominal speed

Dimension [mm]	Buffer type	0,5 m/s	0,63 m/s	0,8 m/s	
Ø 125 x 80	EN 13	700 2.250			
EC type examination test certificate No.: NL16-400-1002-142-07 Rev. 3					

Specified office: LIFTINSTITUUT B.V.
 Buikslotermeerplein 381
 NL-1025 XE Amsterdam

page 2

Instruction manual for lift buffers distributed by ETN

Bumpers are used as spring and damping elements in lift construction. Depending on the type of lift (with or without throttle or throttle check valve), lift buffers made of cellular polyurethane are used in various dimensions for maximum and minimum application ranges. The load ranges are documented for the individual buffer types in the EU type tests.

Lift buffers are manufactured with various fastening options.

The lift buffers can be arranged individually or side by side. The following must be observed for mounting:

Arrangement side by side:

The distance between the buffer outer surfaces must be at least 40% of the buffer diameter to prevent friction losses and contact at max. deflection.

The mating surface of the buffer must be flat; if several buffers are arranged, this surface must be horizontal to ensure an even load on the individual buffers.

The size is to be determined by the lift manufacturer. A full-surface contact of the buffers with the counter-pressure surface must always be achieved.

Notice:

The lift buffers may only be put into operation if it has been determined that the lift system complies with the provisions of the Lifts Directive 2014/33/EU.

The buffers must not be subjected to permanent loads and thus must not be used as a support point for repair and maintenance work.

Ambient conditions

Temperature range:	-40°C to +80°C, continuous use up to 50°C
Humidity:	70% relative humidity at room temperature Avoid continuous contact with water
Contamination:	Oil and grease compatible, but protect against acids and cleaning agents.

Life, maintenance

ETN lift buffers have a minimum life of at least 5 years, but we cannot guarantee this. They are maintenance-free, but they should be subjected to regular visual checks when inspecting and maintaining safety components. Should the shape of the buffer have undergone considerable visible change, it must be exchanged for a new item. The buffer must also be changed after the lift cage has dropped hard on to the buffer. Changes in colour of the buffer from white to brown relate to the material and have no influence on the technical and physical characteristics of **ETN** lift buffers.

17/12/2025



www.etn-shop.com

Lift buffers corresponding to EN 81 Calculation

Customer

Lift-no.

Operating speed V =

 m/s

1. Cage + Working load

Number of buffer (n) =

$$m_{\max} = \frac{Q + F}{n} = \quad + \quad =$$

 kg

Buffer-no.

$$m_{\min} = \frac{F}{n} = \quad =$$

 kg

2. Counterweight

Number of buffer (n) =

$$m_G = \frac{F + \frac{Q}{2}}{n} = \quad + \quad \frac{\quad}{2} =$$

 kg

Buffer-no.

m = Weight [kg]

F = Cage weight [kg]

Q = Working load [kg]

m_G = Counterweight [kg]

Lift producer:

Technical regularity body:

Signature:

Signature:

Dated:

Dated: