LIFTINSTITUUT

PRODUCTS RvA C 067

EU-TYPE EXAMINATION CERTIFICATE

Issued by Liftinstituut B.V.
identification number Notified Body 0400,
commissioned by Decree no. 2018-0000125182

Certificate no.	: NL15-400-1002-142-04	Revision no.: 2
Description of the product	: Energy accumulation buffers with nonlinear characteristics	
Trademark	: ETN	
Type no.	: EN 12	
Name and address of the manufacturer	: Pleiger Kunststoff GmbH & Co. KG Im Hammertal 51 D-58456 Witten, Germany	
Name and address of the certificate holder	: Elastomer Technik Nürnberg GmbH An der Kaufleite 20 D-90562 Kalchreuth, Germany	
Certificate issued on the following requirements	: Lifts Directive 2014/33/EU	
Certificate based on the following standard	: EN 81-20:2014 Clause 5.8 EN 81-50:2014 Clause 5.5	
Test laboratory	: None	
Date and number of the laboratory report	: None	
Date of EU-type examination	: Jan. – Aug. 2015, March - June 2016, Nov. – Dec. 2020	
Additional document with this certificate	: Report belonging to the EU-type examination certificate no.: NL15-400-1002-142-04 Rev. 2	
Additional remarks	: This revision replaces certificate NL15-400-1002-142-04 Rev. 1 of 23-06-2016 Dimensions Ø100/52/35 x 104 mm Load range 1.0 m/s 400 – 1300 kg Load range 0.8 m/s 500 – 1500 kg	
Conclusion	: The safety component meets the requirements of the Lifts Directive 2014/33/EU taking into account any additional remarks mentioned above	

Amsterdam

Date : 07-12-2020
Valid until : 07-12-2025

ing. P. J. Peeters
Manager Certification

Certification decision by

Report EU-type examination

Report belonging to EU-type examination certificate number	:	NL15-400-1002-142-04
Date of issue of original certificate	:	31-08-2015
Certificate applies to	:	Safety component
Revision number / date	:	2 / 07-12-2020
Requirements	:	Lifts Directive 2014/33/EU Standards: EN 81-20:2014 Clause 5.8 EN 81-50:2014 Clause 5.5
Project number	:	P160108-02, P200265

1. General specifications

Description of the product	:	Energy accumulation buffers with nonlinear characteristics
Trademark	:	ETN
Type no.	:	EN 12
Name and address of the manufacturer	:	Pleiger Kunststoff GmbH & Co. KG Im Hammertal 51 D-58456 Witten, Germany
Laboratory	:	-
Address of examined component	:	Liftinstituut, Alphen aan den Rijn, The Netherlands, Im Hammertal 51, 58456 Witten, Germany
Data of examination	:	Jan.– Aug. 2015, March - June 2016, Nov. – Dec. 2020
Examination performed by	:	R. Kaspersma, E. Verkaik

2. Description safety component

The Energy accumulation buffers with nonlinear characteristics EN 12 from ETN is produced by Pleiger Kunststoff are made of Polyurethane. The buffer tested is a buffer with a height of 104 mm and a diameter of 100 mm. The top has a conical shape. 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 Lift 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 EC type-examination certificate no. : NL15-400-1002-142-04 rev. 1.

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: 400 – 1300 kg
- Load range for a rated speed of 0.8 m/s: 500 – 1500 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.

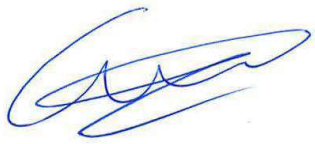
The EU-type examination certificate is only valid for products which are in conformity with the same specifications as the type certified product. The certificate is issued based on the requirements that are valid at the date of issue. In case of changes of the product specifications, changes in the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

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 article 18 of the Lift 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 Lift 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:

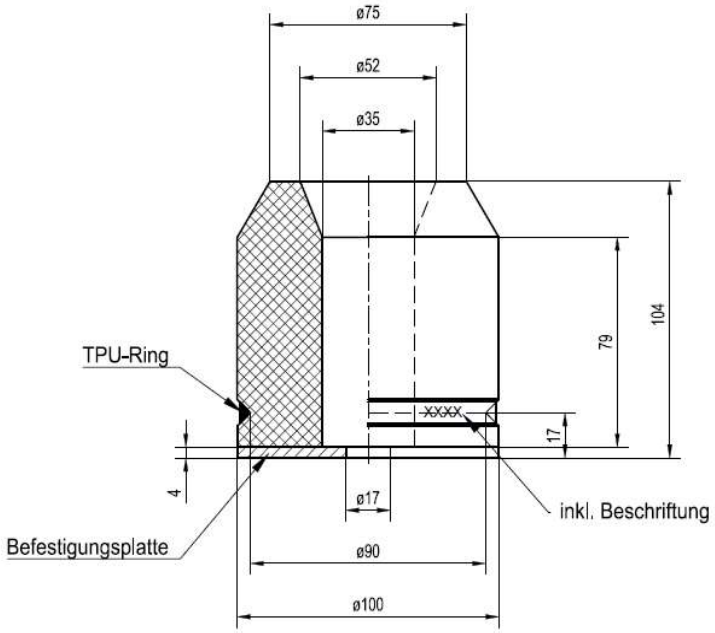


E. Verkaik
Product Specialist Certificatie
Liftinstituut B.V.

Certification decision by:

Annexes

Annex 1 General overview of the product



Elastomer-Technik Nürnberg GmbH An der Kaufleite 20 D-90562 Kalchreuth				ETN			Maßstab 1 : 2
							Artikel-Nr. 320212
					Datum	Name	Aufsetzpuffer EN12 ø 100 x 100 mm
				Bearb.	20.04.2015	Landkammer	
				Gepr.			
				Norm			
				Toleranzklasse ISO 2768-m Nicht bemaßte Kanten ~0,5 x 45°			Zeichnung-Nr. 15-054 / Blatt / Blätter
Zust.	Änderung	Datum	Name	Ursprung			Ersatz für: / Ersatz durch:

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

title	document number	date
User Manual	-	07-03-2008
Drawing	15-054	20-04-2015
Pleiger Statement		12-08-2015
Druckprüfung an Kunststoffpuffern EN12	Protokoll Nr. PRCS006488	30.11.2020

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**
-	August 31st, 2015	Original issue
1	June 23rd, 20156	Update load range and implementation New Lifts Directive
2	07-12-2020	Extended certificate period of 5 years

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 81-20:2014*** ***EN 81-50:2014***
Nominated test centre for the execution of EC type examination test:	***LIFTINSTITUUT B.V.*** ***Buikslotermeerplein 381*** ***NL-1025 XE Amsterdam*** ***Notified body: 0400***
EC 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:	***2020***

Management:	14/12/2020 Date	Christoph Schaake 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	1,0 m/s
Ø 100 x 100	EN 12	500 1.500	500 1.500	500 1.500	400 1.300
EC type examination test certificate No.: **NL15-400-1002-142-04 Rev. 2**					

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

Operating instructions for ETN lift buffers

ETN lift buffers are used as springs and damping elements for lifts. Depending on the type of lift (with or without choke or choke non-return valve), **ETN** lift buffers are available in a range of sizes for different max. and min. loads. The load ranges for **ETN** lift buffers are recorded in the EC type examination certificates.

ETN lift buffers are manufactured with a circular steel mounting plate with central hole for central screw fitting.

ETN lift buffers can be arranged side-by-side or in line, but the following must be noted when fitting the units:

Side-by-side mounting of the lift buffers

The distance between the outer surfaces of the buffer must be at least **40 %** of the buffer diameter
(e.g. buffer ∅ 100 mm, distance 40 mm)

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 agains 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.

Note

ETN lift buffer may only be used when it has been determined that the lift installation conforms to the **Lift Directive 2014/33/EU**. **ETN** lift buffers must not be subjected to a continuous load and therefore must not be used as resting point during repair and maintenance work.

Lift buffers corresponding to EN 81 Calculation

Customer | Lift-no.

Operating speed V = m/s

1. Cage + Working load

Number of buffer (n) =

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

Buffer-no.

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

2. Counterweight

Number of buffer (n) =

$m_G = \frac{F + Q/2}{n} = \frac{\quad + \quad/2}{\quad} =$ kg Buffer-no.

m = Weight [kg]
Q = Working load [kg]
F = Cage weight [kg]
m_G = Counterweight [kg]

Lift producer:	Technical regularity body:
Signature:	Signature:
Dated:	Dated: