



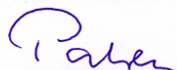
Zentrum der Förder- und Aufzugstechnik
Roßwein gGmbH
 Institut für Förder- und Aufzugstechnik an der Hochschule Mittweida (FH)



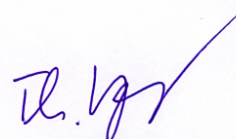
EC type-examination certificate

Certificate No.	0532/PU46/2-BP
Notified body	Zentrum der Förder- und Aufzugstechnik Roßwein gGmbH Döbelner Str. 65 A D-04741 Roßwein Ident. No.: 0734
Product / Type	Energy-accumulating buffer with damping of the return movement and non-linear characteristic Type EN 6
Name and address of the Manufacturer	Pleiger Kunststoff GmbH & Co. KG Im Hammertal 51 D-58456 Witten
Name and address of the applicant (Certificate owner)	Elastomer-Technik Nürnberg GmbH An der Kaufleite 20 D-90562 Kalchreuth
Date of submission	2005-08-16
EC-Directive / European Standard	<ul style="list-style-type: none"> ▪ Lift Directive 95/16/EC ▪ EN 81-1/2 : 1998 + AC : 1999
Test laboratory	Zentrum der Förder- und Aufzugstechnik Roßwein gGmbH - Prüflaboratorium -
Number and date of test report	0531/PU46/1-BE of 2005-09-09
Statement	The safety component conforms to the directive's essential safety requirements and health requirements for the respective scope of application stated of the annex to this EC type-examination certificate.
Certificate date	2005-09-13
Annex	Annex to the EC type-examination certificate no. 0532/PU46/2-BP

Zentrum der Förder- und Aufzugstechnik
 Roßwein gGmbH
 - Zertifizierungsstelle -



Prof. H. Patzelt
 Head of the
 Certification Body

DI Th. Meyer
 Editor

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 HRB 11449

Sitz der Gesellschaft
 ZFA Roßwein gGmbH
 Döbelner Straße 65 A
 04741 Roßwein



Annex to the EC type-examination certificate No. 0532/PU46/2-BP

1 General Information

1.1 Scope of application

Application with elevators by Lift Directive 95/16/EC and harmonised European Standard EN 81-1/2

1.1.1	max. rated speed:	1,6 m/s
1.1.2	max. hitting speed:	1,84 m/s
1.1.3	min. mass:	630 kg
1.1.4	max. mass:	1.700 kg

1.2 Allowed ambient conditions

(according to manufacturer's instructions)

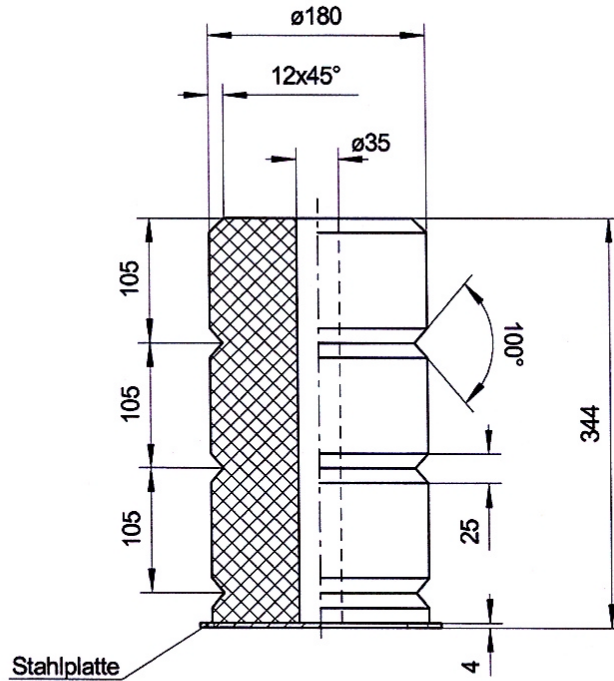
1.2.1	Temperature range:	-40°C to +80°C, continuous use up to +50°C
1.2.2	Humidity:	Max. 70% relative humidity at room temperature, avoid continuous contact with water, no effect of chemical substances
1.2.3	Contamination:	Oil-compatible and grease-compatible, protect against acids and leaches

1.3 External signs of the buffer

1.3.1	Dimensions:	Diameter: 180 mm Height: 340 mm
1.3.2	Kind of fixing:	Quadratic steel mounting plate with 4 hols for screw fittings \varnothing 17 mm
1.3.3	Marking:	CE marking, Certificate owner („ETN“), Type of buffer („EN 6“), Number of the EC type-examination certificate („0532/PU46/2-BP“), Identity number of notified body („0734“)

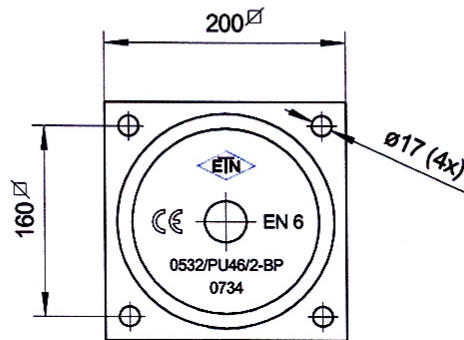
2 Additional remarks

- Deceleration peaks by the single tests to the EC type-examination have appeared no more than 3,0 g_n.
- The details of the operating instructions for ETN-lift buffers are must be noted.
- The EC type-examination certificate and their annex is to be enclosed the drawing no. 05-133 of 2005-08-17.
- The EC type-examination certificate may be used in connection with the pertinent annex only.



Th. Meyer
DI Th. Meyer
 Leiter Prüflaboratorium

13. SEP. 2005



Elastomer-Technik Nürnberg GmbH
 An der Kaufleite 20
 D-90562 Kalchreuth



Maßstab 1 : 5

Artikel-Nr. 320206

	Datum	Name
Bearb.	17.08.05	J. Sperber
Gepr.		
Norm		

Aufsetzpuffer EN 6
 ø 180 x 340 mm

Zeichnung-Nr. 05-133

Blatt
 Blätter

Zust.	Änderung	Datum	Name	Ursprung	Ersatz für:	Ersatz durch:



EU type examination for ETN-lift buffers

The type examination tests for ETN lift buffers made from Cell-PU have been carried out in accordance with lift directive 95/16/EG. 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	1,6 m/s
Ø 180 x 340	EN 6	630 1.700
EC type examination test certificate No.: 0532/PU46/2-BP		

Specified office: Zentrum der Förder- und
Aufzugstechnik Roßwein gGmbH
Döbelner Str. 65 A
D-04741 Roßwein

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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 \varnothing 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 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.

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.

31/03/2016



Lift buffers corresponding to EN 81 Calculation

Customer

Lift-no.

Operating speed V = m/s

1. Cage + Working load

Number of buffer (n) =

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

Buffer-no.

$$m_{\min} = \frac{F}{n} = \text{---} = \text{---} \text{ kg}$$

2. Counterweight

Number of buffer (n) =

$$m_G = \frac{F + Q/2}{n} = \text{---} + \text{---} / 2 = \text{---} \text{ kg}$$

Buffer-no.

m = Weight [kg]

F = Cage weight [kg]

Q = Working load [kg]

m_G = Counterweight [kg]

<p>Lift producer:</p> <p>Signature:</p> <p>Dated:</p>	<p>Technical regularity body:</p> <p>Signature:</p> <p>Dated:</p>
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