

EU-TYPE EXAMINATION CERTIFICATE

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

Certificate no. : NL15-400-1002-187-08 Revision no.: 2

Description of the product : Energy dissipation type buffer

Trademark, type : LP 50 x 695

Name and address of the manufacturer : Henning GmbH & Co. KG
Loher Strasse 4
D-58332 Schwelm
Germany

Name and address of the certificate holder : Henning GmbH & Co. KG
Loher Strasse 4
D-58332 Schwelm
Germany

Certificate issued on the following requirements : Lifts Directive 2014/33/EU

Certificate based on the following standard : EN 81-20:2014, EN 81-50:2014 5.5

Test laboratory : Liftinstituut, Alphen aan den Rijn

Date and number of the laboratory report : December 7th, 2015, Test report belonging to the EC type-examination certificate nr.: NL15-400-1002-187-08

Date of EU-type examination : April 2015 – December 2015, September 2016

Additional document with this certificate : Report belonging to the EU type-examination certificate nr.: NL15-400-1002-187-08 Rev.2

Additional remarks : Maximum nominal speed 3.2 m/s
Load range 500 kg – 4500 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 : 10-10-2018
Valid until : 24-09-2021


ing. P.J. Peeters
Manager


Certification decision by

Report EU-type examination

Report belonging to EU-type examination certificate number : NL15-400-1002-187-08
 Date of issue of original certificate : December 7th, 2015
 Product description : Safety component
 Revision number / date : 2 / October 10th, 2018
 Requirements : Lifts Directive 2014/33/EU
 Standard(s): EN 81-20:2014
 EN 81-50 :2014 section 5.5
 Project number : P180021

1. General specifications

Name and address manufacturer : Henning GmbH & Co. KG
 Loher Strasse 4
 D-58332 Schwelm
 Germany
 Description of safety component : Energy dissipation type buffer
 Type : LP 50 x 695
 Laboratory : Liftinstituut. Alphen aan den Rijn
 Date / Data of examination : April 2015 – December 2015, September 2016
 Examination performed by : R. E. Kaspersma

2. Description safety component

The LP 50 x 695 is an energy dissipation type buffer or hydraulic buffer and is designed for lifts with a nominal speed up to 3.2 m/s. A contact is provided which checks if the plunger of the hydraulic buffer is in the extended position. The contact of the buffer is reset automatically.

Specifications hydraulic buffer LP 50 x 695

| | |
|---------------------|---------|
| Total buffer height | 1665 mm |
| Diameter | 155 mm |

| | |
|--|----------------------------|
| Buffer stroke | 695 mm |
| Standard Oil (-10 °C .. +50 °C) | HLP ISO VG 46 DIN 51524-2 |
| Low temperature oil (-20 °C .. +40 °C) | HVLP ISO VG 22 DIN 51524-3 |

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 of EN 81-20:2014 and EN 81-50:2014 clause 5.5.

The examination included:

- Examination of the technical file (See annex 2):
- Check of performed calculations
- Examination of the representative model in order to establish conformity with the technical file.
- Inspections and tests to check compliance with the requirements.

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.

4.1 Calculations

The calculations were found accordance with the requirements.

4.2. Measurements

According clause 5.5.3 of EN 81-50 the buffer was tested with the aid of weights, corresponding to the minimum and maximum masses, falling in free fall to reach at the moment of impact the maximum speed called for.

A description of the tests performed is given in "Test report belonging to EC-type examination nr.: NL15-400-1002-187-08".

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:

- The energy dissipating (hydraulic) buffer is used only for lifts with nominal speed up to 3.2 m/s
- The maximum impact speed is 3.7 m/s
- A contact is provided to check if the buffer is in its extended position.
- The maintenance instructions for the user's manual of the lift shall be provided with the lift.
- Load range is 500 – 4500 kg

6. Conclusions

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

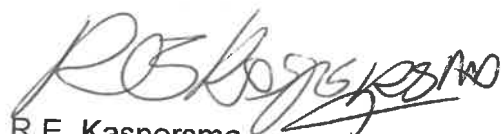
The EU-type examination certificate is only valid for products which are in conformity with the same specifications as the type certified product. The certificate is issued based on the requirements that are valid at the date of issue. In case of changes of the product specifications, changes in the 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 to 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:



R.E. Kaspersma
Product Specialist Certification
Liftinstituut B.V.

Certification decision by:



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

| title | document number | date |
|---|-----------------|------------|
| Betriebsanleitung Liftpuffer LP | Ausgabe 3.1DE | 27-11-2015 |
| Druckprüfung Ölschaugläser | - | 25-07-2000 |
| Ölempfehlung für Hydraulikpuffer Bauart LP und LPSA | - | - |
| Berechnungen zur Baumusterprüfung für Aufzugspuffer LP 50 x 425 bis LP 50 x 695 | - | 16-11-2015 |
| LP50x695-Doku | 25069590 | 12-11-2015 |
| HYDRAULIKROHR- LP50X695B2c | 97510603 | 16-10-2015 |

Annex 3 Revision of the certificate and its report

| Rev.: | Date | Summary of revision |
|-------|-----------------------------------|---------------------------------------|
| - | December 7 th , 2015 | Original issue |
| 1 | September 24 th , 2016 | Implementation of new Lifts Directive |
| 2 | October 10 th , 2018 | Error in address fixed |