

*Translation of the original Declaration of Conformity*

<b>Article number</b>	<b>Material</b>	<b>EU-Type-examination Certificate</b>	<b>Main dimensions of elastic part</b>
300400A	AUTAN® HE	EU-B 137	∅ 80 x 81 mm
300401A	AUTAN® HE	EU-B 139	∅ 101 x 80 mm
300401B	AUTAN® HE	EU-B 140	∅ 101 x 80 mm
300402A	AUTAN® HE	EU-B 142	∅ 128 x 82 mm
300403A	AUTAN® HE	EU-B 145	∅ 167 x 81 mm
300404A	AUTAN® HE	EU-B 146	∅ 223 x 82 mm
300178A	AUTAN® HE	EU-B 143	∅ 129 x 103 mm
300183A	AUTAN® HE	EU-B 144	∅ 142 x 101 mm
300335A	AUTAN® HE	EU-B 138	∅ 81 x 120 mm
300405A	AUTAN® HE	EU-B 141	∅ 101 x 163 mm
300400L	AUTAN® HE	EU-B 147	∅ 80 x 80 mm
300401M	AUTAN® HE	EU-B 148	∅ 100 x 80 mm
300401L	AUTAN® HE	EU-B 149	∅ 100 x 80 mm
300402L	AUTAN® HE	EU-B 150	∅ 125 x 80 mm
300403L	AUTAN® HE	EU-B 152	∅ 165 x 80 mm
300404L	AUTAN® HE	EU-B 153	∅ 220 x 80 mm
300419L	AUTAN® HE	EU-B 151	∅ 140 x 80 mm

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## EU Declaration of conformity for ACLA Lift Buffers

*Translation of the original Declaration of Conformity*

<b>mounting type:</b>	300XXXX1	Type A: round steel plate
	300XXXX3	Type C: square steel plate
	300XXXX4	Type D: foamed-in perforated steel sheet
	300XXXX5	Type AD: round steel plate plus additionally foamed-in perforated plate
	300XXXX6	Type CD: square steel plate plus additionally foamed-in perforated plate
	Mounting types 5 and 6 are only for L and M buffers	
<b>year of manufacture:</b>	as specified on the buffer	
<b>safety component according to:</b>	point 4. a) i) of annex III to directive 2014/33/EU Energy-storing buffer with non-linear characteristic	
<b>compliance with harmonized standards:</b>	EN 81-20:2020 EN 81-50:2020	
<b>further relevant documents:</b>	TB 282.05 ACLA Operational Instructions	
<b>type-examination was effected by:</b>	notified body 0036 TÜV SÜD Industrie Service GmbH, Westendstr.199, D-80686 München	
<b>certificate of conformity to type according to:</b>	annex IX (Module C 2) to the directive 2014/33/EU	
<b>issued by:</b>	notified body 0036 TÜV SÜD Industrie Service GmbH, Westendstr.199, D-80686 München	

This lift buffers complies with the relevant harmonisation rules of the European Union.

Cologne, 28.06.2022

ACLA-WERKE GMBH  
Dipl.-Kfm. Gerhard Kieffer  
CEO



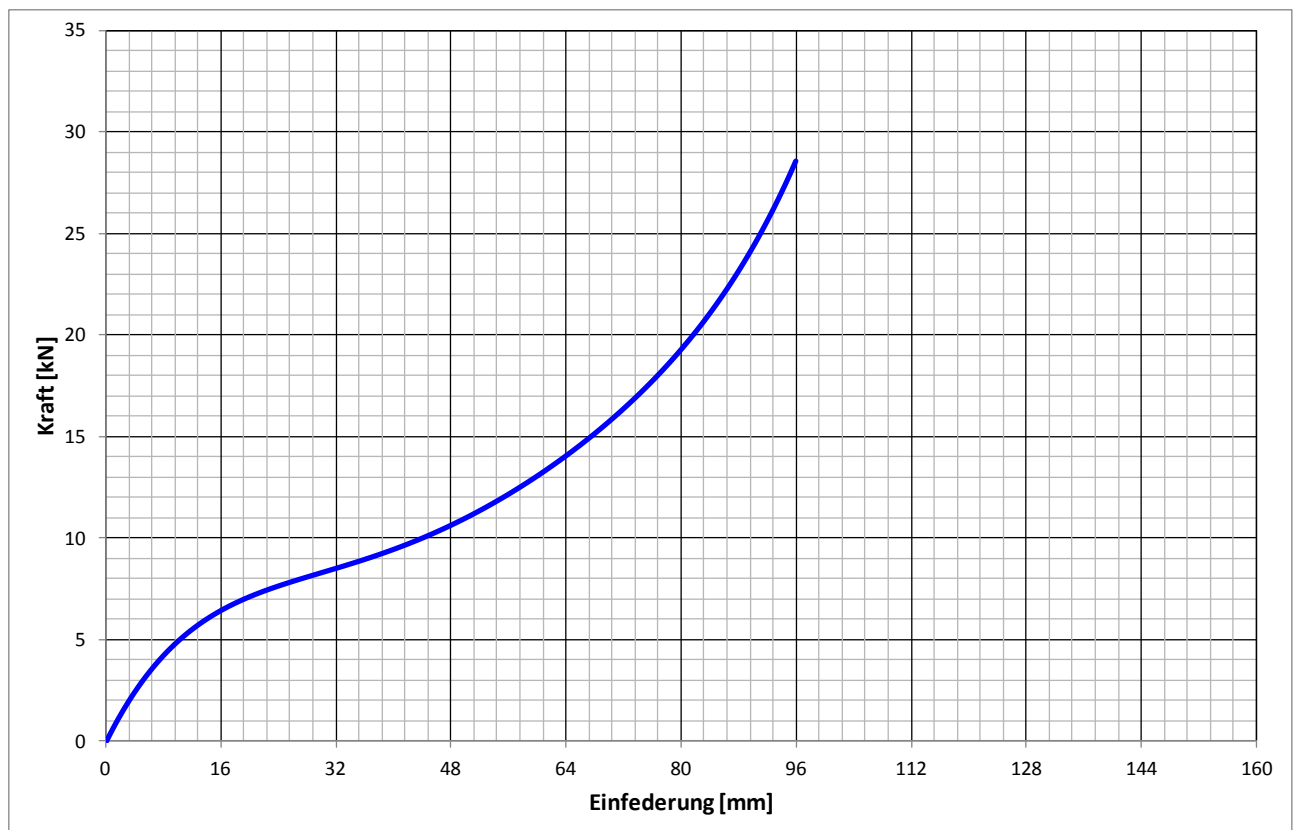
## Load/Deflection Curve for ACLA<sup>®</sup> Lift Buffers of AUTAN<sup>®</sup> HE

### Buffer group 300405A...

300405A ↓ ↓ ↓

300405A

elastic base: Ø101/35 x 163 mm, AUTAN<sup>®</sup> HE, density A  
1 mounting type 1 = type A, round steel plate  
3 mounting type 3 = type C, square steel plate  
4 mounting type 4 = type D, foamed-in perforated plate  
X X code for model details, no meaning for the EC type-test certificate



curve of first deflection, measured with 100 mm/min.

Individual curves may vary from the ideal curve within the admissible diffusion.

Our verbal or written recommendations for any application as well as tests are carried out to the best of our knowledge. They are without engagement also as far as patent rights of third parties are concerned, and do not exempt you from checking the products supplied by us to their suitability for the intended procedure and purpose. Application, use and processing of the products are outside our control, and are exclusively the responsibility of the customer. Moreover our general sales conditions apply. This data sheet replaces all previous sheets. As it is not subject to any updating service the user has to check for relevance, whenever necessary.

## ACLA<sup>®</sup> Lift Buffers of AUTAN<sup>®</sup> HE Expansion and supporting surface during deflection

### Buffer group 300405A...

300405A ↓ ↓ ↓

300405A

elastic base: Ø101/35 x 163 mm, AUTAN<sup>®</sup> HE, density A

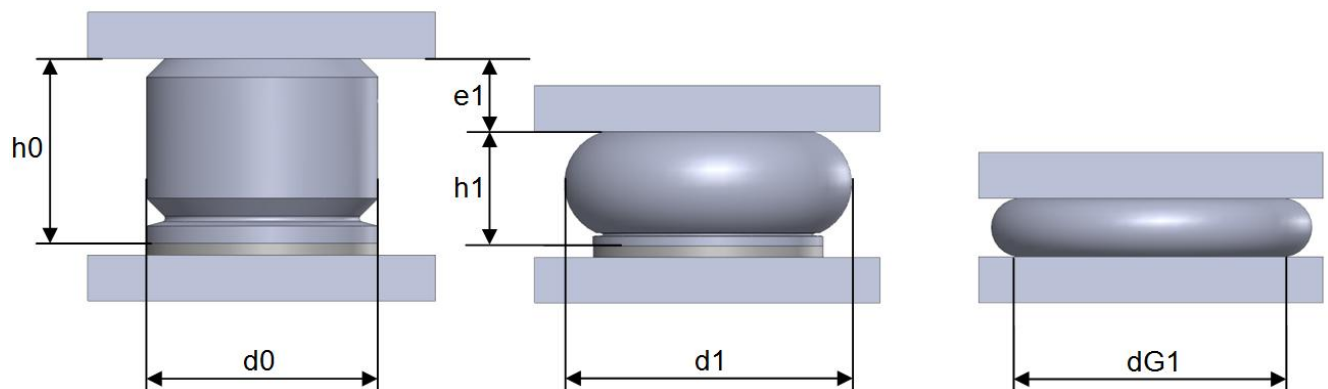
1 mounting type 1 = type A, round steel plate

3 mounting type 3 = type C, square steel plate

4 mounting type 4 = type D, foamed-in perforated plate

X X code for model details, no meaning for the EC type-test certificate

Considering a compression of the buffer from its initial diameter  $d_0$  and an elastic height  $h_0$  by a spring displacement  $e_1$  to the remaining height  $h_1$ , the buffer will be expanded convexly to diameter  $d_1$ . In case of a strong deformation the expanded area will rest on the counter-pressure plates on diameter  $d_{G1}$ .



The following curve shows some values for the expanded buffer diameter and the diameter of the supporting surface depending from the deflection.

These are just reference values which may vary within the admissible diffusions depending on external conditions and preload of the buffer.

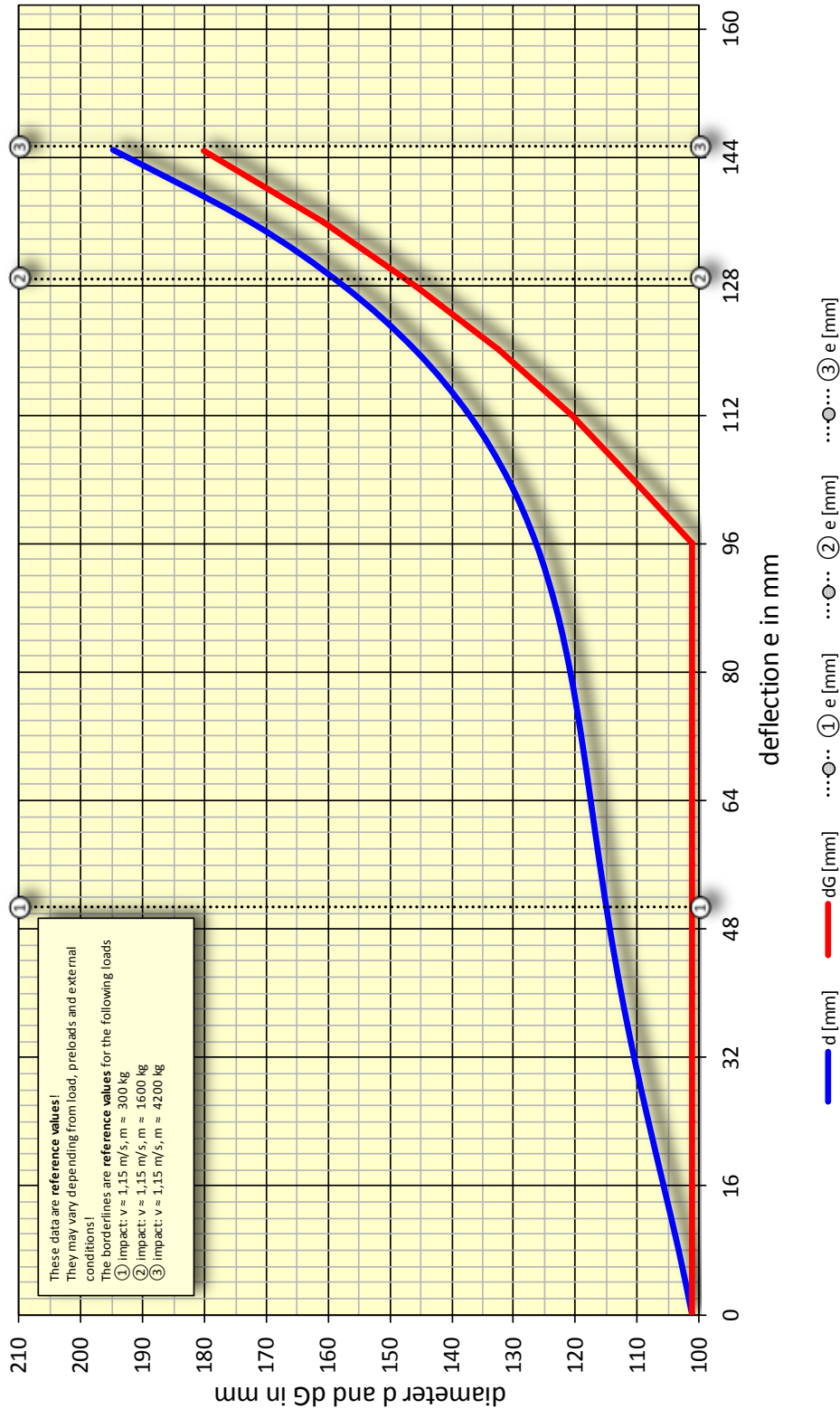
The deflection values acc. to lines ① ② ③ correspond roughly with the values reached at the loads shown in the additional field of the curve.

This Technical Sheet has only orientating character and is just intended to support the lift constructor. It is not suitable for a quality control of the buffers.



**buffer group 300405Axxx, AUTAN HE, Ø101/35 x 163/..., density A**

Approximate values: Expanded diameter d and supporting surface dG at compression e



**Example:**  
As described in line ② there is an impact of 1600 kg at 1,15 m/s. This results in a deflection of e1 = 129 mm up to line ②. Buffer diameter dG1 = 147 mm rests on the counter-pressure surface and the expanded diameter d1 is 159 mm. The buffer requires radially a free space of (159 - 101) / 2 = 29 mm and a counter-pressure surface of ø 147 mm for free deflection. Twice the distance between 2 of the same buffers is required.