

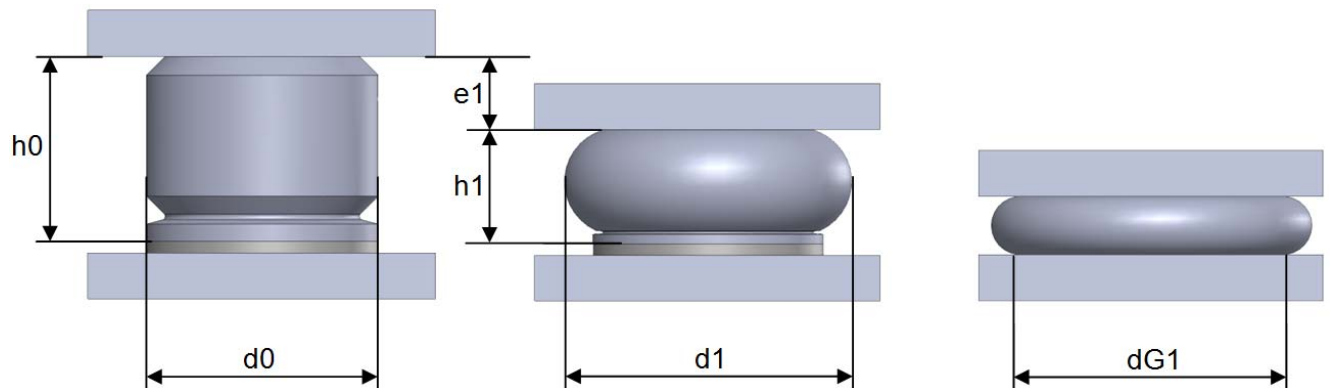
ACLA® Lift Buffers of AUTAN® HE Expansion and supporting surface during deflection

Buffer group 300401L...

300401L ↓ ↓ ↓

300401L	elastic base: Ø100/36 x 80 mm, AUTAN® HE	
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
5	mounting type 5 = type AD,	round steel plate plus additionally foamed-in perforated plate
6	mounting type 6 = type CD,	square steel plate plus additionally foamed-in perforated plate
XX	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} .

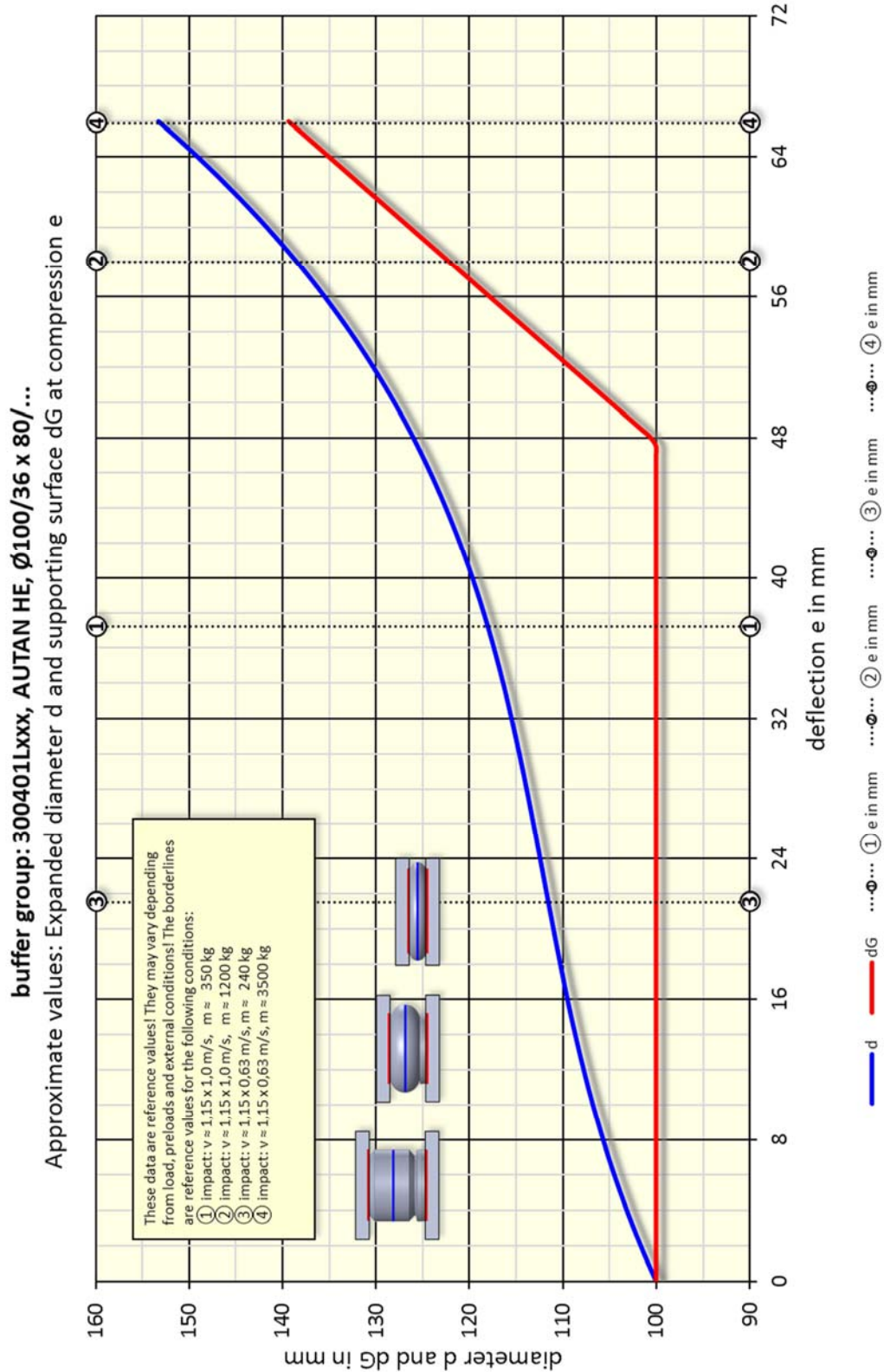


The following curve shows some values for the expanded buffer diameter and the diameter of the supporting surface depending from the deflection.

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... 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.



Example:
As described in line ② there is an impact of $m = 1200 \text{ kg}$ at $1,15 \text{ m/s}$. This results in a deflection of $e \approx 58 \text{ mm}$ up to line ②..
Buffer diameter $dG \approx 122 \text{ mm}$ touches the counter-pressure surfaces and the expanded diameter is $d \approx 138 \text{ mm}$. The buffer requires radially a free space of $(138 - 100) / 2 \approx 19 \text{ mm}$ for free deflection. Twice the distance between 2 of the same buffers is required.