



ABT POLIURETAN INSTRUCTION MANUAL FOR POLYURETHANE LIFT BUFFERS

EUROPE LIFT DIRECTIVE: 2014 / 33 / EU

NEW STANDARDS: EN 81-20:2015, EN 81-50:2014

1. The buffer stopped the lift cabin and/or counterweight, if they pass the last station. It is forbidden to use the buffer for other applications. “ABT POLIURETAN” assumes no responsibility for the false use.

2. Polyurethane buffers are made for the elevators speed 1,00 m/s and lower values.

3. The maximum and minimum strengths of the buffers according to the elevator speeds are given in the table above and the appropriate type can be selected.

BUFFER TYPE	EYL 1	EYL 2	EYL 3	EYL 4	EYL 5	EYL 8
DIAMETER (Ø mm)	Ø125	Ø100	Ø125	Ø182	Ø80	Ø165
HEIGHT (H mm)	100	160	195	350	80	85
NOMINAL LOAD P+Q (Kg-V=m/sec.)	V=1m/sec. 2250 Kg	V=1m/sec. 2100 Kg	V=1m/sec. 3000 Kg	V=1,6m/sec. 1700 Kg	V=0,63m/sec. 1350 Kg	V=1 m/sec. 3750 Kg
MAX. LOAD P+Q (Kg-V=m/sec.)	V=1,2m/sec. 1450 Kg	V=1,2m/sec. 1500 Kg	V=1,2m/sec. 2100 Kg	-----	V=0,80m/sec. 1200 Kg	V=1,2 m/sec. 3750 Kg
MIN. LOAD P+Q (Kg-V=m/sec.)	V=1m/sec. 300 Kg	V=1m/sec. 400 Kg	V=1m/sec. 300 Kg	V=1,6m/sn. 640 Kg	V=0,63m/sec. 160 Kg	V=1 m/sec. 500 Kg
MIN. LOAD P+Q (Kg-V=m/sec.)	V=1,2m/sec. 300 Kg	V=1,2m/sec. 600 Kg	V=1,2m/sec. 300 Kg	-----	V=0,80m/sec. 140 Kg	V=1,2m/sec. 500 Kg

4. The buffer assembly Buffer must be fixed to the bottom with smooth, horizontal plate. Installation of buffer must be face to face connection to bumping plate. If multiple buffers assembled together, so they should be symmetrical under the cabin or counter-weight attached. The plate which connects the buffer to ground, must be horizontal and not change its stiffness under pressure.

5. Under maximum load, the buffer without obstacle can be compressed (max. compression under load is 80 % of original height.)

The compression under load is %70 of original height on buffers which works 1,6 m/sec. Speed and 1.700 kg load like EYL – 4. (EYL-4 Buffer has tested for impact with 1,84 m/sec. Maximum speed and 1.700 kg load. EYL-4 is according to EN 81-1/2 : 1998 + A3 : 2010 – F5 standards.

6. If more than a buffer used in order to absorb higher loads, must have the same buffer (same type and same height) to be taken. At the same height, but with different stiffness and capacities, the buffers can not be used at all.

7. Storing and using temperatures should be between -40 and +80 degrees. Relative Humidity must be under 80 % degree. Permanent contact with water should be avoided.

8. The buffers are not damaged by solid or liquid oils. Avoid contact with bases and acids.

9. Damaged buffers must not be used.

10. The buffer must be checked in the elevator shaft at intervals of six months to check whether any damage has occurred and whether the connection has deteriorated.

11. The life span of ABT polyurethane lift buffers can be much longer than five years, as long as the minimum five years, operating and maintenance requirements are met. Polyurethane buffers do not require any maintenance. However, the visual correctness of these types of security elements should be examined periodically. The color of our buffers is white when first produced. Over time it can turn into brown tones. This is common and there is no change in the physical and mechanical properties of the material. The buffers must not be under constant load during operation and maintenance.

12. Please contact the manufacturer (ABT POLIURETAN) in case of any trouble which can be encountered.