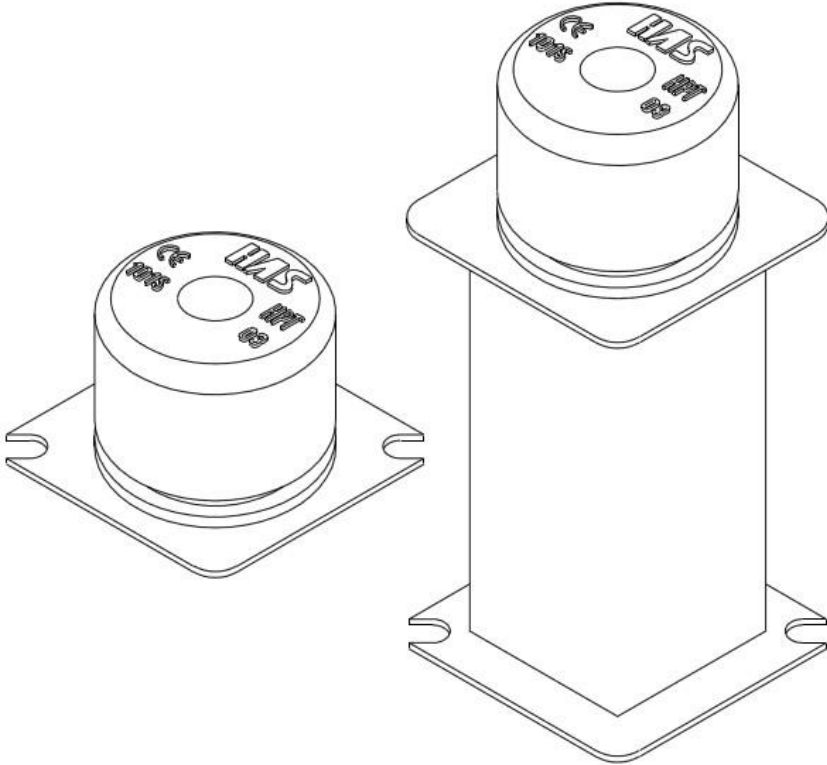


POLYURETHANE BUFFER INSTALATION AND USAGE MANUAL



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i. The Usage of Polyurethane Buffer

The usage of Polyurethane Buffer; to make the cabin and counterweight, which comes with nominal speed, stopped by braking when the system passes the last stop point.

It is not suitable to use the buffer for other applications. HKS HAS ASANSÖR A.Ş. will not hold any responsibility for possible damages arising from using the buffer for other applications. Proper usage is carried out by strictly considering all the manual and construction and maintenance instructions.

ii. Guarantee Conditions Responsibility

General principles of sales and shipment of H.K.S. HAS ASANSOR A.Ş. are valid. The guarantee and responsibility for loss will not be covered when the following matters occur:

- To use the buffer for other applications.
 - To install, operate, maintain and protect the buffer in a way that is inappropriate by the instructions.
 - To use broken buffers or without security, protection equipment.
 - To ignore the transportation, storing, installation, operating, maintenance and protection instructions in this manual.
 - To implement some modification without giving any notice to the manufacturer.
- Repair applications violating the regulations without knowledge of producer. Damages caused by unrelated people, earthquakes and other disaster.

iii. Structural Amendments in Polyurethane Buffer

Buffers are completely assembled in factory, all the necessary experiments are done and shipped ready to use.

ATTENTION: Polyurethane Buffer is a licensed safety part. Any kind of modification is not allowed. Modifications make the Buffer out of guarantee of HKS HAS ASANSÖR A.Ş.

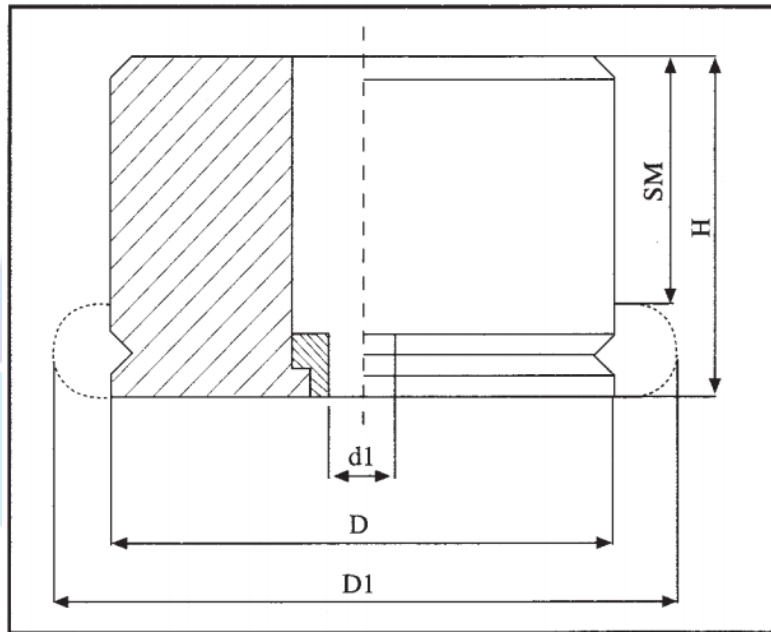
iv. Possible Dangers May Occur While The Polyurethane Buffer Are In Use

Adequate distance in the pit must be taken while working in the pit. To use the buffer for other kinds of applications may cause injuries on the users or third parties or can damage construction. Risky breakdowns must be repaired immediately.

1. Definition of the Product

1.1 Definition of Polyurethane Buffer Usage Area

Polyurethane Buffers are used in elevator system. Within the usage limitations buffer can be used in all types of elevators concerning cabins and counterweights. Usage must be in accordance with EN 81-20 2014/33/EU. The use of Polyurethane buffer; to stop the cabin / counterweight when it passes its last stop with its nominal speed.



Tampon Tipi	HPT02	HPT03	HPT04
Diameter (D) mm	100	125	125
Height (H) mm	160	100	192
Max.Load(kg)	1240	1900	1784
Min.Load (kg)	440	440	440
Plate diameter(D1)	140	120	190

1.2. Choosing the Type of Polyurethane Buffer

Choice by carried mass. This distinction is made according to total weight of cabin's maximum value (P+Q) and the maximum value of counterweight. (G)

1.3. Multi-Application

Polyurethane Buffers are suitable for multiple applications.

1.4. Important Notice

Here, only same type of stroke and buffers designed for same load can be used together. The value of permitted total weight can be increased by using additional buffers. Allowed total load can be rated by multiplying the number of buffers used. Maximum speed does not change.

2. Transportation and Storing

2.1. Packing and Transportation

Polyurethane buffers are carried in carton boxes.

HPT 02	1 Box	12 Pcs
HPT 03	1 Box	12 Pcs
HPT 04	1 Box	6 Pcs

2.2. Procedures of Accepting Cargo on Customer Area

Check all equipments whether they are complete and their packing.
Controlling damages and other suspicious points.

2.3. Informing Damages and Documentation of Damages Caused by Transportation

- Be sure that there are no damages caused during the transportation.
- If damages occur, prepare documents to explaining the matter with drawings and photos.
- Please send these documents to H.K.S. HAS ASANSÖR A.Ş. immediately.

2.4. Opening Boxes

Packing materials can be recycled.

- Special transportation care and insurance are on customer account.

2.5. Temporary Storing

If the buffers will not be transported immediately keep it away from damp, wet and other possible hazards.

2.6. Enviromental Conditions

Storing temperature should be between -30° C and $+80^{\circ}$ C. Realitive moisture shouldn't exceed 50%.

3. Installation

Pay attention to following points:

- Polyurethane Buffer must be fixed to the bottom with smooth plate.
- To install it on base, necessary to have appropriate construction in order to make it stable under pressure power.
- Installation of Polyurethane Buffer must be face to face connection to bumping plate.
- Pay attention to centre the buffer against of additional power.
- Construction must be according to the elevator instructions.
- If more than one Polyurethane Buffer is used, all must be at the same height.
- The plate which connects the buffer to ground must be smooth and not change its shape under pressure of power

4. Operating

Before operating the buffer, be sure that all instructions in section 4. Are completely obeyed.

5. Maintenance

- Check the buffer in a systematic period, at least 2 times per year.
- Polyurethane Buffer must be installed tightly.
- Connection bolts must be fastened tightly.

ATTENTION : Polyurethane buffer must be changed when it faces any crack, borken spring or any other damages since it will affect the working system.

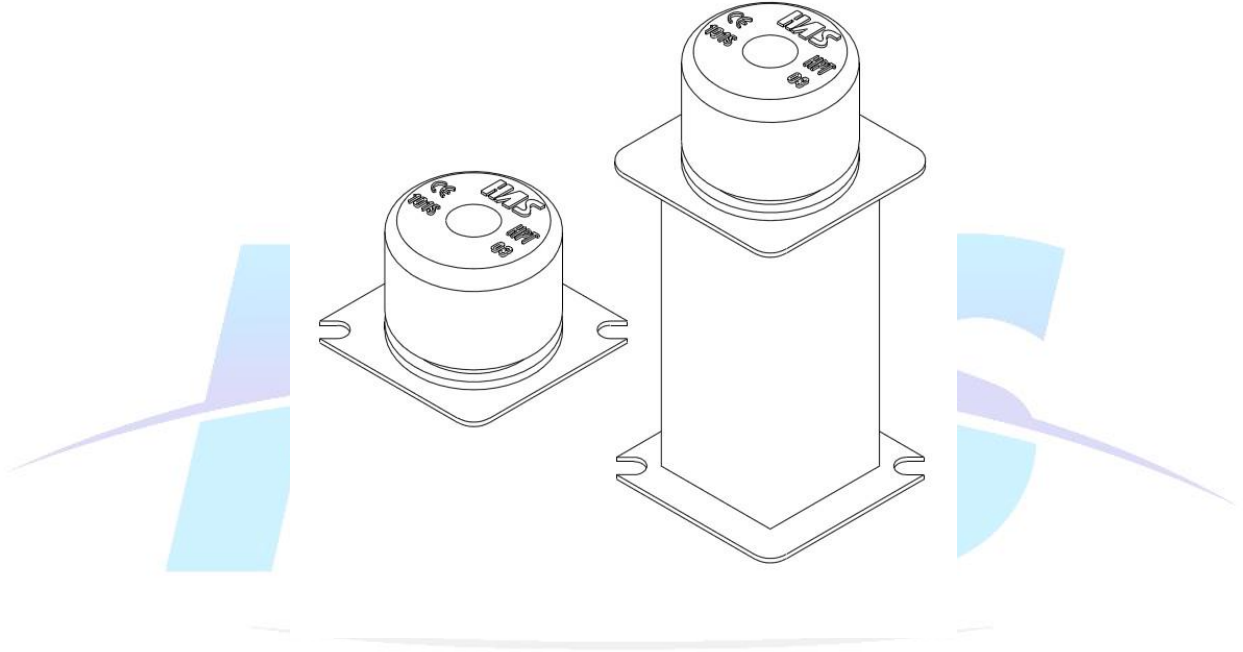
6. Protection

Polyurethane Buffer is a certificated component. It must be shipped on condition "ready to use"

Never allowed to make any kind of amendments. Any repair, without notice H.K.S. HAS ASANSOR A.Ş., ends the guaranty.

Must be changed immediately on the condition that it has any faulty or it doesn't work properly.





ELEVATOR



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