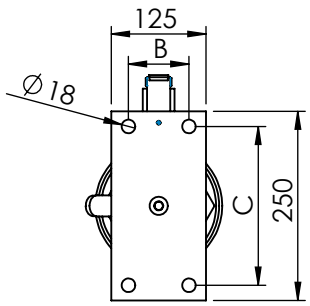
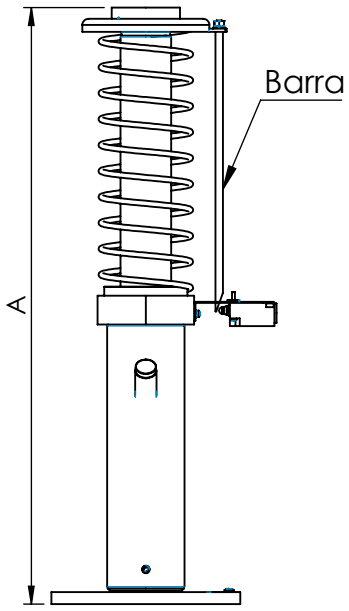



# 1. PRODUCT DESCRIPTION

The hydraulic buffer is an energy dissipation damper that complies with EN 81-20 and EN 81-50, so it can be used in elevator constructions.




| CHARACTERISTICS | | |
|---|---|---|
| Elevator rated speed | m/s | 2.0 |
| Max.iimpact velocity(115%) | m/s | 2.3 |
| Buffer quality range | Kg | 800-3800 |
| Compression stroke | mm | 275 |
| Free height (A) | mm | 790 |
| Installation size (BxC) | mm | 80 x 210 |
| Compressed height | mm | 515 |
| Quantity of oil | L | 1.5 |
| Weight with oil | Kg | 24.8 |

## SAFETY WARNINGS

-The hydraulic buffer is a safety device that must be installed, inspected and commissioned by trained and qualified personnel.

-Please be sure to observe local health and safety regulations.

-Always consider the weight of the shock absorber to be lifted and make sure to use an appropriate lifting method .

## 2. PREPARATION

- Check that the information on the buffer label complies with the requirements requested for the elevator.
- The permissible ambient temperature is -5°C to +40°C.
- The installation site must be clean and dry, and must be able to withstand the impact load.
- Fill with oil (see point 7) until it reaches its optimal level (see point 5.2)

☞ The shock absorber is supplied with its necessary oil for the installing procedure.

## 3. ATTACHMENT

1. Position the device vertically and parallel to the guides on the floor or on a suitable surface. Piston pointing upwards.
2. Install the shock absorber under the center of gravity of the car chassis or counterweight. In the case of installing more than one buffer, distribute them around the center.
3. Secure in position with 4 M18 bolts quality 8.8.
4. Make sure that the rod is vertically aligned for the limit switch.
5. Make the connections of the limit switch contact.

## 4. FINAL COMMISSONING

1. Carry out the instructions in section 5.
2. Check electrical connections.
3. Make sure the rod is vertically aligned for the limit switch contact.

⚠ The buffer is a safety component and must not be installed without contact.

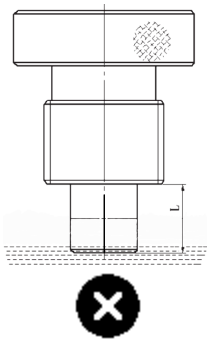
# 5. INSPECTIONS

## 5.1. EXTENDED PISTON INSPECTION

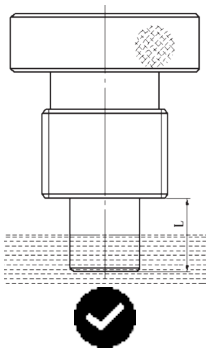
- Verify that the contact is not activated.
- Check that the operating height (section 1) coincides with the buffer height.

## 5.2. OIL LEVEL CHECK

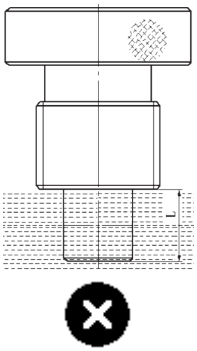
- To start the inspection, do not open the buffer and check that the piston is fully extended.
- Make sure that the buffer has been filled to the correct level at an ambient temperature between 16 to 25 °C.
- Unscrew the cap and then check if it meets the requirements of the following pictures.



Low oil level
Top up with more oil
(Section 6)



Correct oil level



High oil level
Remove oil

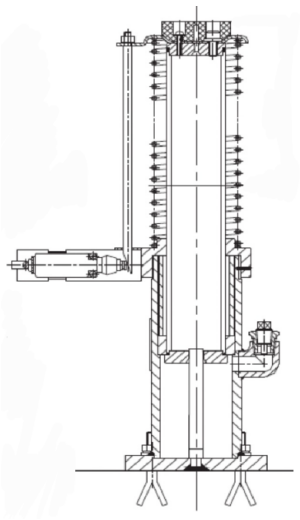
- The oil level depends on the temperature. If the temperature is too low, the oil level may be low. If the temperature is too high, the oil level may increase.
- If the oil level is too high, it may be caused by the presence of bubbles.

In that case, compress several times and gently shake the buffer to recheck the level. If the oil level does not drop in spite of having the piston fully extended, oil must be removed.

## 5.3. GENERAL VISUAL INSPECTION

- Pay attention if oil stains are present on the floor.
- Check that the spring is in good condition.

## 6. FILL WITH OIL



1. Unscrew and remove the cap
2. Fill the buffer with an oil complying with the specifications in specifications in section 7.
3. Check oil quantity in section 1
4. Tighten the cap
5. Squeeze the plunger so that oil enters the cavities.
6. After decompression, remove the cap after 10 minutes.
7. Check the oil level according to section 5.2.

## 7. OIL SPECIFICATIONS

Hydraulic oil DIN 51524-HLP (ISO 6743/4 HM) of viscosity ISO VG 68.

## 8. MAINTENANCE

We recommend that the following instructions be carried out each time the periodic inspection according to the regulations that follows the present elevator.

1. Remove dirt and particles around the piston.
2. Check that the oil level is correct (section 5.2).
3. Check that the operation of the contact is correct.



## EQUIPMENT REMOVAL

This symbol on the product or on its packaging indicates that this product may not be treated as household waste. Instead, the product must be disassembled and taken to a local collection point or collection center. recycling facility. The separable components are the hydraulic oil, the buffer body and the limit switch contact.

By ensuring that the product is disposed of correctly, you will help to prevent potential negative environmental and health consequences that could be caused by improper disposal of the product. For more information, please contact our local office or a waste disposal service.