OIL BUFFER INSTALLATION

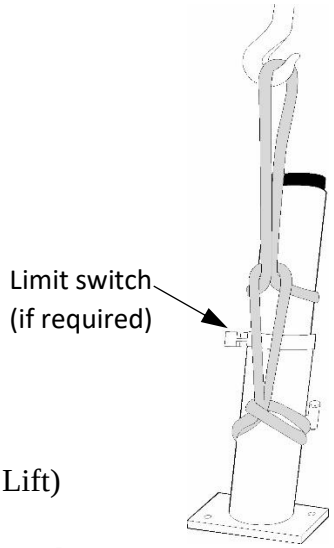
This paragraph shows some useful informations for the installation of Hydronic Lift oil buffers,

NOTE: Remove the plastic film or the plastic bag that protect the ram during the shipment before installing the buffer.
During the compression of the buffer the actuator pin and the safety switch must be always installed to prevent oil leakage.

1. BUFFER LIFTING

Use a textile rope for lifting so that the piston surface does not get damaged.
Place the textile rope so that the limit switch (bracket or switch) does not get broken during the lifting..

NOTE: Some oil buffers are shipped in vertical position and filled with oil; during the transport and handling, the oil buffer must keep in vertical position to avoid oil leakage.



2. WORKING CONDITION

Temperature: -5/45°C; (For different Temperature range ask to Hydronic Lift)
Humidity: less than 95%
Medium has no explosion risk, no risk of corroding metal and destroying insulation
Pit is clean and no ponding.

3. LIFE TIME

The life of the unit is assessed only on "condition monitoring" practice.
As an example, the replacement of the units will be made if:
- during planned checks, if presence of corroded metal parts are noted
- Following occasional events that may have compromised the integrity and functionality of some components of the hydraulic damper, such as flooding of the pit or a fire..

4. ALIGNEMENT OF THE BUFFER

Check that the buffer is plumb. The deviation of the piston from the plumb line can be maximum 1 mm /1 m stroke (0.33 Inch / 39 Inch stroke).

Before putting on service the oil buffer, check the oil level in the following way:
- minimum level through the minimum visual oil level
- maximum level by opening the max. oil level plug discharging the excess oil.

During oil buffer functional test, at nominal impact speed, a small oil leakage is admitted from the air venting ports.
Always check buffer’s oil level, after performance at nominal impact speed test.
Oil buffers are safety components to prevent damages during impacts at elevator nominal working conditions.
If during lift installation or maintenance oil buffers are compressed, please allow a suitable time (10/15 minutes) elapse between two following strokes.

5. OIL FILLING

Use mineral oil ISO VG GRADE 46, VI 104 min.

5.1. OB serie

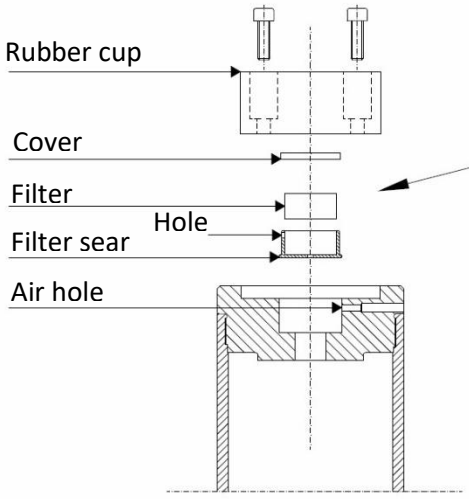
(*) The buffer up to 655001G01 are filled with oil. In any case, oil filling could be necessary for maintenance operations.
The buffers 655001G06 and above are delivered empty and they must be filled with oil before operating.

Oil filling of the OB type buffers made according to EN Code:

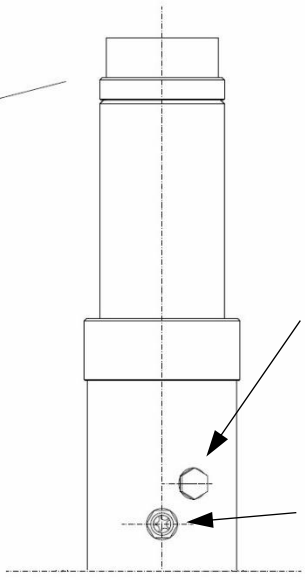
1. Disassemble the piston top..
2. Fill in oil to the buffer from the piston top according to the quantity given in the chart,when filling is almost complete, last 0.5 liters, pour slowly while keep on checking the oil level through the glass indicator on the cylinder. DO NOT OVERFILL!
3. Install the piston top parts and let the buffer rest. In the meantime, if possible, compress the piston (piston compressed 40...50 mm) then release slowly.
4. Check the oil level looking through the oil level on cylinder after 10 minutes..
5. for the unit with maximum oil level cup, remove the cup and the extra oil will go out from the maximum level hole on the side of the buffer..

Buffer code	*Litres*	*Gallons*
655001G01 (*)	1.7	0.45
655001G02 (*)	2.1	0.56
655001G03 (*)	2.6	0.69
655001G04 (*)	3.1	0.82
655001G05 (*)	3.7	0.98
655001G06	4.6	1.22
655001G07	5.6	1.48
655001G08	7.1	1.88
655002G01	11.7	3.10

OB



NOTE: Make sure that the hole in the filter seat is on the opposite side of the air hole in the ram cup when assembly.



Maximum level cup Drain *the excess oil opening the cup before put on service the oil buffer (not present on all oil buffers)*

Minimum oil level indicator; *Oil must be always present*

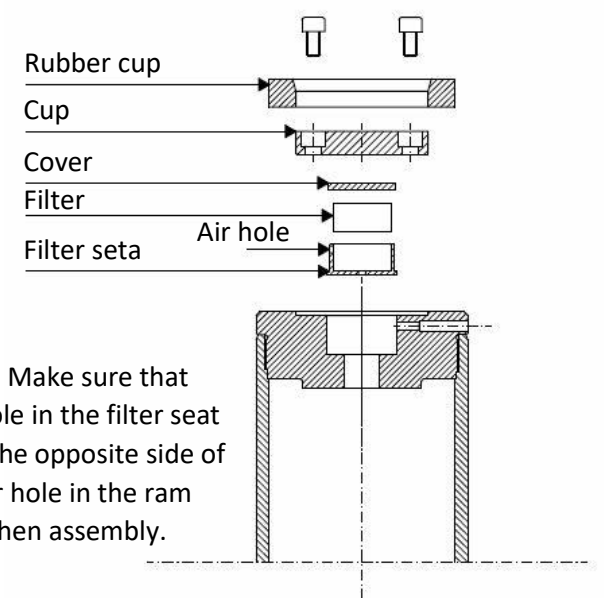
Buffers made according to ANSI: see *OBH 32-35*

5.1. OBH serie

OBH buffers are delivered empty and they must be filled with oil before operating.

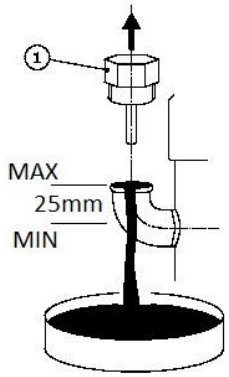
1. Disassemble the piston top.
2. Fill in oil to the buffer from the piston top according to the quantity in the table + approx. 0.2...0.3 litres (0.42 ... 0.63 PINTS) extra oil.
3. Install the piston top parts and let the buffer rest. In the meantime, if possible, compress the piston (piston compressed 40...50 mm - 1.5 ... 2.0 INCHES) then release slowly.
4. Place a recovery tank under the inspection cup, open the screw cover and let excessive oil flow out.

OBH 32-35

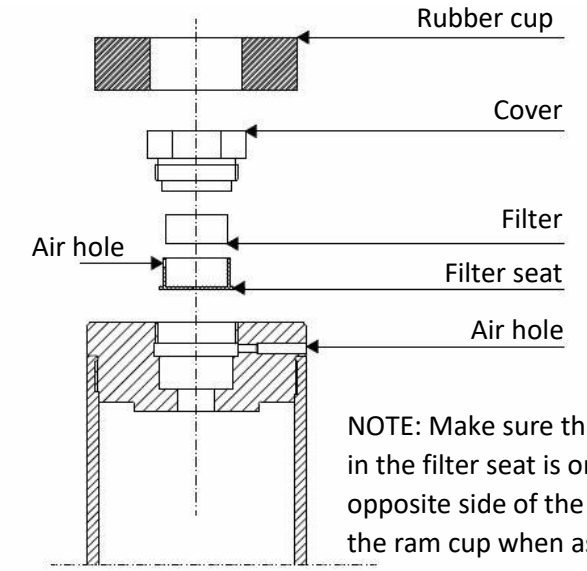


NOTE: Make sure that the hole in the filter seat is on the opposite side of the air hole in the ram cup when assembly.

Buffer code	*Litres*	*Gallons*
655004G10	9.3	2.46
655004G11	11	2.91

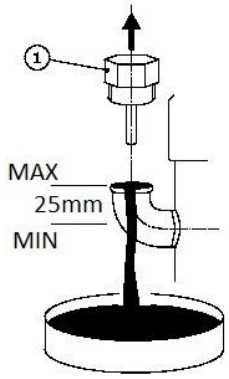


OBH 40-56



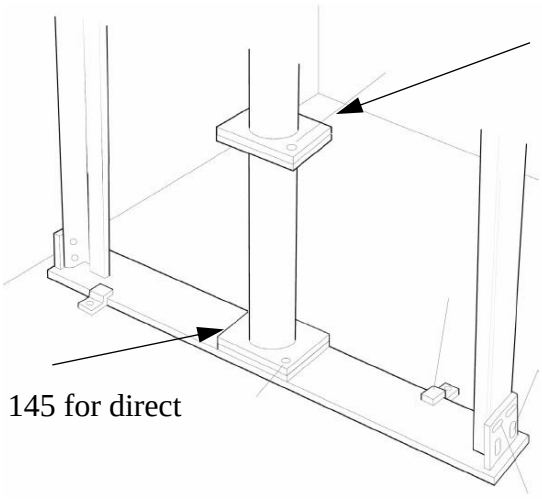
NOTE: Make sure that the hole in the filter seat is on the opposite side of the air hole in the ram cup when assembly.

Buffer code	*Litres*	*Gallons*
655004G01	11.7	3.10
655004G03	17.7	4.68
655004G04	22.8	6.03



6. FIXING DETAILS

Base plate fastening



Supports

The supports are installed according to the table and drawing.
The clearance between the support (1) and the car must be 100...150 mm when the car is standing on the compressed buffer. The buffer and the extension are fastened with steel clamps to the support

CL	HE	BB	support (1)	support (2)
< 2000	-	< 2000	-	-
≥ 2000	-	≥ 2000	X	-
< 2000	< 2000	≥ 2000	X	-
≥ 2000	< 200	< 4000	X	-
< 2000	≥ 2000	< 4000	-	X
≥ 2000	≥ 2000	≥ 4000	X	X
< 2000	≥ 2000	≥ 4000	X	X