



LKB SERIES INSTALLATION GUIDE



APPLICABLE TO ELEVATOR BUFFER SERIES

LKB 10,12,16&18



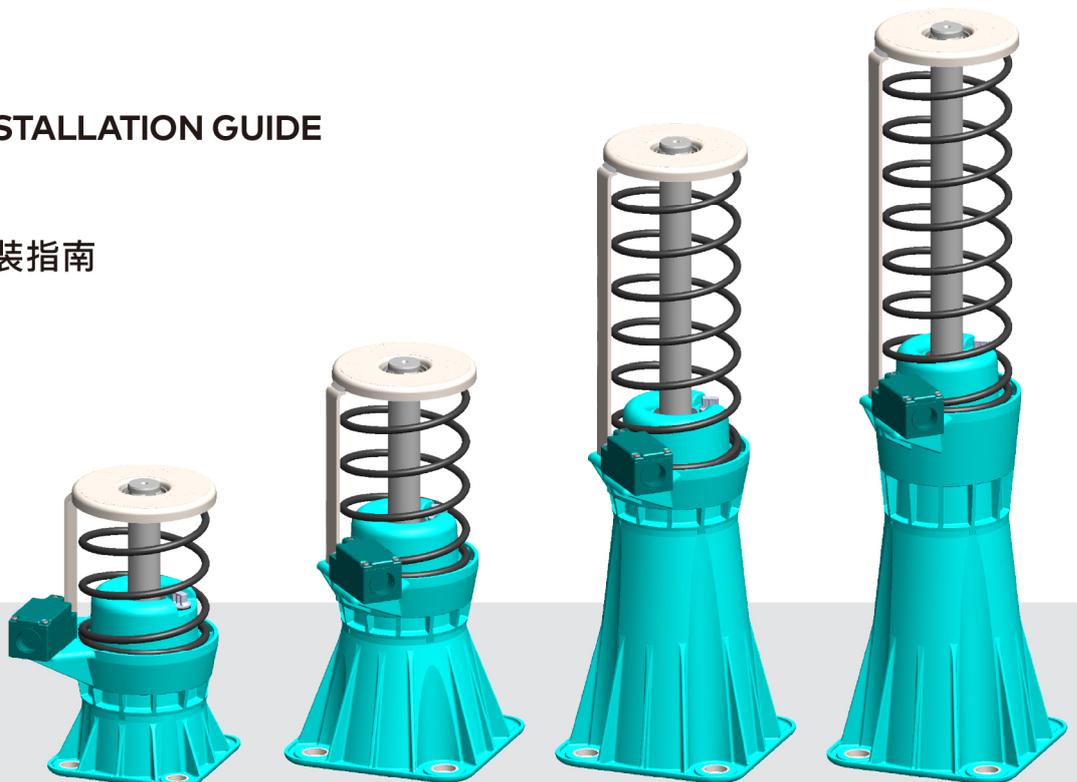
ENGLISH

INSTALLATION GUIDE



中文
CHINESE

安装指南



LKB BUFFERS: INSTALLATION INFORMATION

LKB系列缓冲器：安装信息

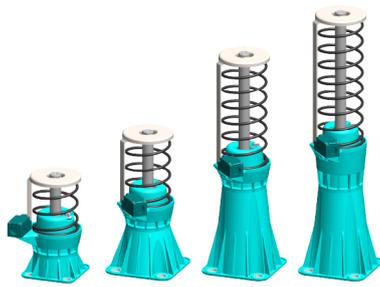
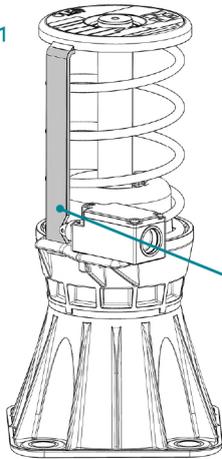


Figure 1 图 1



1 SCOPE OF DELIVERY

供货范围

Oleo buffers are supplied with a standard finish suitable for dry conditions. The standard finish is not suitable for wet, corrosive conditions.

Oleo缓冲器所有产品均进行了标准的表面处理，适用于干燥环境。但标准的表面处理并不适用于潮湿、腐蚀性环境。特殊表面处理的液压缓冲器可根据客户要求定制。

Oleo LKB buffers can be supplied pre-filled with oil, or without oil.

Oleo LKB系列液压缓冲器供货时，液压油可选择预填充或不填充。

Check the buffer to confirm it is pre-filled or without oil. Should there be any discrepancies contact Oleo before proceeding

核对缓冲器确认其是预填充还是未填充液压油。如有有任何不一致之处，在安装之前请联系Oleo

2 INDICATION OF USE

使用说明

Environmental temperature acceptable conditions in line with EN81-20 (0.4.16) Ambient Temperatures.

适用环境温度与EN81-20(0.4.16)的要求一致。

3 HANDLING

操作

When handling buffers ensure your regional health and safety laws are adhered to.

在操纵系列液压缓冲器时，务必确保符合当地的健康及安全法规。

! WARNING

DO NOT lift buffer with the striker rod shown in Figure 1. Avoid contact as this may cause damage.

! 警告

请勿使用如图1所示的冲击杆来提升缓冲器避免接触以免带来损坏。

Always confirm the weight of the buffer to be lifted and ensure that a suitable lifting method is used.

核对缓冲器的重量，并确保使用相应的吊装方法。

4 BUFFER WEIGHTS

缓冲器重量

LKB Range



LKB 10 LKB 12 LKB 16 LKB 18

Buffer Model LKB 10 LKB 12 LKB 16 LKB 18

Without Oil

kg	2.902	3.775	5.301	6.03
lbs	6.398	8.322	11.687	13.294

When Filled with Oil

kg	3.136	4.145	5.793	6.665
lbs	6.914	9.139	12.771	14.694

缓冲器型号 LKB 10 LKB 12 LKB 16 LKB 18

无液压油

kg	2.902	3.775	5.301	6.03
磅	6.398	8.322	11.687	13.294

预填充液压油

kg	3.116	4.145	5.793	6.665
磅	6.914	9.139	12.771	14.694

5 BUFFER INSTALLATION PROCEDURE

缓冲器安装步骤

Ensure the buffer has been secured into its installation position. The entire area under the base of the unit should be generally flat, level and free of protrusions. Oleo recommends a bolt size M10 fixings LKB 10 and M12 fixings for LKB 12,16,18 and all four fixing positions are used.

确保缓冲器已移动并固定至安装位置。设备底座下方的整个区域需整体平整、水平且无凸起物。Oleo建议使用M10的螺栓固定LKB10

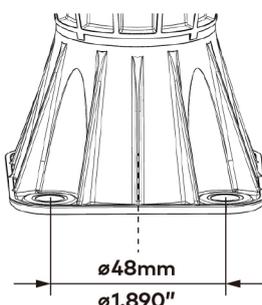
Ensure this area at the base of the buffer, shown in Figure 2 is supported.

M12的螺栓固定LKB12、16、18并使用全部四个固定位置。确保如图2所示的缓冲器底座部分得到支撑。

Buffers are to be fitted vertically parallel to guide rail ±5mm.

缓冲器将垂直安装，并与导轨平行，误差±5mm。

Figure 2 图 2



Do you have a pre-filled buffer?

No -Please continue to Section 6.

Yes - Go to OIL FILLED OPTIONS Section 8.

您的缓冲器是否已预填充液压油?

否——请继续第6部。

是——跳转至第8部分“油液填充选项”。

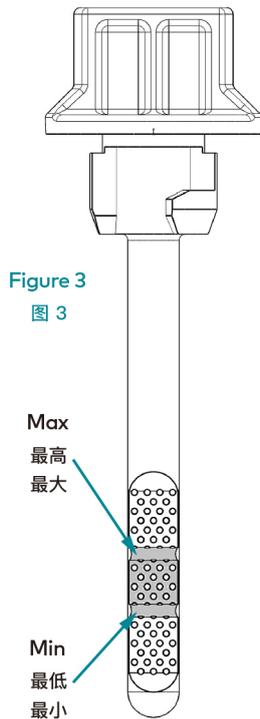


Figure 3 图 3

6 OIL SPECIFICATION

油液规格

The oil must conform to the specification on the buffer data plate .
ISOVG68 : SG.88/90 at 15°C : hydraulic.
Pour Point :-18°C or lower, Viscosity index 75 or higher

液压油必须符合缓冲器数据铭牌上的规格ISOVG68 : SG.88/.90 at 15°C : hydraulic. 倾点:-18°C或更低。粘度系数75或更高。

⚠ CAUTION

Take care when handling the oils. Observe the oil manufacturers recommendations.

⚠ 注意

在处理液压油时, 务必小心。遵照油品制造商的建议。

The oil volume guide can be found in table below:

所需注入的油液量可通过下表查得:

Buffer Model	LKB 10	LKB 12	LKB 16	LKB 18	缓冲器型号	LKB 10	LKB 12	LKB 16	LKB 18
Approximate Oil Volume					大概油量				
Litres	0.26	0.412	0.547	0.706	升	0.26	0.412	0.547	0.706
US Gallons	0.068	0.108	0.144	0.186	加仑(美)	0.068	0.108	0.144	0.186

MINIMUM & MAXIMUM

The oil level needs to be between the Minimum and Maximum marks indicated on the dipstick as shown in Figure 3.

最低及最高液位

油位需界于如图3所示量油杆上所标注的最高、最低液位之间。

7 OIL FILLING PROCEDURE

液压油填充步骤

⚠ NOTICE

The buffer must be vertical and fully extended before filling with oil.

⚠ 注意

在注入油液之前, 缓冲器必须垂直放置并且完全展开。

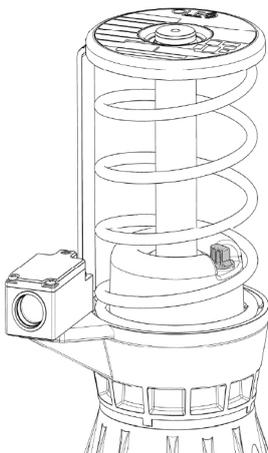
⚠ CAUTION

Take care when handling the oils. Observe the oil manufacturers recommendations.

⚠ 注意

在处理液压油时, 务必小心。遵照油品制造商的建议。

Figure 4 图 4



- 1 Quarter turn the dipstick (indicated on Figure 4) and remove from the buffer.
- 2 Wipe dipstick clean and keep safe.
- 3 Gradually fill the buffer with oil until the oil level is visible between the minimum and maximum levels on the dipstick (indicated on Figure 3).
- 4 Allow the buffer to stand for a minimum of 30 minutes.
- 5 Re-insert the dipstick.
- 6 Remove dipstick and inspect level. The oil level needs to be between the minimum and maximum marks indicated on the dipstick as shown in Figure 3.
- 7 Once oil level is correct replace dipstick and securely fasten.
The oil must be within the correct operating range for the buffer to perform correctly.
If further oil is required after checking repeat steps 1-7.

- 1 旋开量油杆, 并将其从缓冲器内移出(如图4所示);
- 2 将量油杆擦拭干净;
- 3 向缓冲器内缓慢注入液压油, 直到液位可视, 至量油杆所示的最小及最大液位之间(如图3所示);
- 4 静置缓冲器至少30分钟;
- 5 重新插入量油杆, 轻轻拧上, 不要拧太紧;
- 6 移出量油杆并检查液位。油位需界于如图3所示量油杆上所标注的最高、最低液位之间;
- 7 如果液位正确, 重新装入量油杆, 并旋紧。
油液必须界于正确的范围, 缓冲器方能正常运行。
检查之后如果需要注入更多的液压油, 重复步骤1-7。

⚠ WARNING

DO NOT overfill past the maximum dipstick mark. If this occurs, then oil must be removed from the buffer.

⚠ 警告

请勿填充超过量油杆所标的最高液位。如有发生, 超出的油液必须从缓冲器内移出。

8 OIL FILLED OPTIONS

油液填充选项

The buffer now needs to stand for at least 30 minutes; this allows the oil to settle.

缓冲器现需竖立至少30分钟;以便油液沉淀下来。

9 OIL CHECKING PROCEDURE

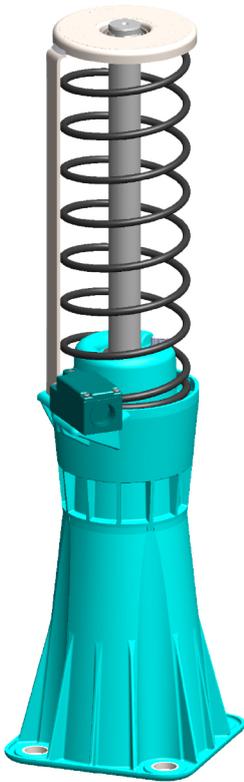
油液检查步骤

The oil level must be correct and needs to be checked using the following procedure:

- 1 Quarter turn the dipstick (indicated on Figure 4) and remove from the buffer.
- 2 Wipe dipstick clean.
- 3 Re-insert the dipstick.
- 4 Remove dipstick and inspect level. The oil level needs to be between the maximum and minimum marks indicated on the dipstick as show in Figure 3.
- 5 Once oil level is correct replace dipstick and securely fasten. The oil must be within the correct operating range for the buffer to perform correctly. If further oil is required after checking refer to Oil Filling Procedure Section 7.

油位必须正确，需要按以下步骤进行检查：

- 1 旋开量油杆，并将其从缓冲器内移出(如图4所示)；
- 2 将量油杆擦拭干净；
- 3 重新插入量油杆，轻轻拧上，但不要拧太紧；
- 4 移出量油杆并检查液位。油位需介于如图3所示量油杆上所标注的最高、最低液位之间；
- 5 如果液位正确，重新装入量油杆，并旋紧。油液必须介于正确的范围，缓冲器方能正常运行。检查之后如果需要注入更多的液压油，参考第7部分“液压油填充步骤”。



⚠ WARNING

DO NOT overfill past the maximum dipstick mark. If this occurs, then oil must be removed from the buffer.

⚠ 警告

请勿填充超过量油杆所标的最高液位，如有发生，超出的油液必须从缓冲器内移出。

10 FINAL COMMISSIONING

最终调试

Oleo recommends the final 7 step process is followed prior to commissioning:

- 1 Ensure oil level is correct.
- 2 Ensure striker is vertically aligned to $\pm 0.5\text{mm}$.
- 3 Complete electrical connections to the limit switch.

Oleo建议在试运行之前，完成以下最后7个步骤：

- 1 确保液位正确；
- 2 确保冲击杆垂直偏差 $\pm 0.5\text{mm}$ ；
- 3 完成限位开关的电气连接。

⚠ WARNING

As a safety critical component, buffers should not be installed without a switch.

⚠ 警告

作为安全装置，如果没有开关，缓冲器不得予以安装。

- 4 Compress the buffer at slow speed across the full working stroke then allow to recoil.
- 5 Allow the oil to settle for 30 minutes then recheck oil level - see Section 9.
- 6 Finally, impact the buffer at the full rated speed of the elevator.
- 7 Complete final checks of oil level and the buffer is at correct working height.

- 4 在其全工作行程内，以低速压缩缓冲器，然后待其回弹；
- 5 待油液静置30分钟，然后重新检查液位——参见第9部分；
- 6 以电梯的额定速度冲击缓冲器；
- 7 最后检查液位，以及缓冲器是否处于正确的工作高度。

⚠ NOTICE

CHECK: The maximum overall height against table below LKB 10,12 +0/-2.8mm and LKB 16,18 +0/-5mm of the figure stated.

⚠ 警告

校对:按下表进行核对整体最大高度，LKB10,12应在以下数值的+0/-2.8mm范围之内:LKB16,18应在以下数值的+0/-5mm范围之内。

LKB Range

Buffer Model

LKB 10

LKB 12

LKB 16

LKB 18

缓冲器型号

LKB 10

LKB 12

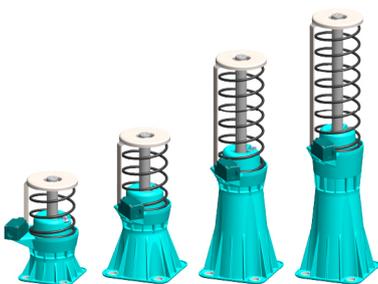
LKB 16

LKB 18

Extended Height

伸展高度

mm	222.45	307.45	484.2	576.15	毫米	222.45	307.45	484.2	576.15
in	8.758	12.1	19.06	22.68	英寸	8.758	12.1	19.06	22.68



LKB 10

LKB 12

LKB 16

LKB 18

⚠ WARNING

If the buffer has not returned to the fully extended position (determined by measuring overall height) contact Oleo International

⚠ 警告

如果缓冲器未返回至完全展开的位置(通过测量整体长度而定)，请联系Oleo International。

11 MAINTENANCE

维护

Oleo recommends the following be carried out every 12 months from installation:

- 1 Clean away debris and dirt from around the plunger and switch.
- 2 Check the oil level is correct.
- 3 Compress the buffer across its full working stroke.
- 4 After the compression, ensure the buffer has returned to its correct working height and visually check for any damage. See correct working height in table in Section 10.

Ensure regional jurisdictions and laws for maintenance are adhered to.

Oleo建议自安装之日起，每12个月进行以下操作：

- 1 清理活塞筒及开关附近的灰尘、杂质；
- 2 检查油位是否正确；
- 3 在缓冲器全工作行程之内，进行压缩；
- 4 压缩之后，确保缓冲器可恢复至其正确的工作高度，并目视检查有无损伤。正确的工作高度请参见第10部分的表格。

确定符合当地的维护检修法规。