

Installation Guide for OKS ChronoLube System

This installation guide is only to be used for the mechanical mounting of the lubricator, and is intended to prevent basic mounting errors. It is only to be used in conjunction with the operating instructions of the corresponding OKS ChronoLube product. The installation drawings shown are only shown as mounting examples. Many other mounting options are also possible. The following basically applies: One OKS ChronoLube System per lubricating point. The liability exclusions of the operating instructions apply.

1. Specification of Mounting Method

You can choose between direct and remote mounting. Mounting directly on the application is preferable, as this makes the maximum pressure of the lubricator available directly at the lubricating point. However, direct mounting is not always possible. If you answer **one** of the following questions with "Yes", "remote mounting" is recommended.

1. Is the lubricating point subjected to strong vibrations?

Yes

No

2. Is it difficult or dangerous to reach the lubricating point during production?

Yes

No

3. Is the lubricating point subjected to one of the following influences?

- High-pressure water jets from high-pressure cleaners
- Caustic/corrosive cleaning chemicals
- Mechanical influences such as stone impact etc.

Yes

No

4. Do guard grills, walls or other protective measures need to be removed to reach the lubricating point?

Yes

No

5. Is the ambient temperature at the lubricating point below -10°C or above 50°C ?

Yes

No

2. Guidelines for Direct Mounting

The OKS ChronoLube System is equipped with an R $\frac{1}{4}$ " male thread. If your application has a different thread version, you require a reduction. You can purchase a broad range of reductions from OKS.

Please observe the following guidelines when installing the ChronoLube System:

1. If possible, install the ChronoLube System vertically (mandatory with oil as a lubricant). Vertical mounting greatly reduces the load on the thread of the lubricating point and of the ChronoLube System. A support bracket should always be used.
2. Do not overtighten the ChronoLube System. Please remember that the lubricator has a plastic thread.
3. Use OKS 90 (medium-strength thread locking paste) or a comparable product for all metal-to-metal connections (extensions, reductions etc.) OKS 90.
4. Pre-lubricate the attached parts (extensions, elbows etc.) prior to installation with the same lubricant, with which the ChronoLube cartridge is filled so that all lines are already completely filled with lubricant (corresponding 400 g cartridges are available from OKS).
5. When using oil as a lubricant, an oil throttle (OKS 5746) must be mounted, which prevents the lubricant from running out of the ChronoLube System.

The support bracket

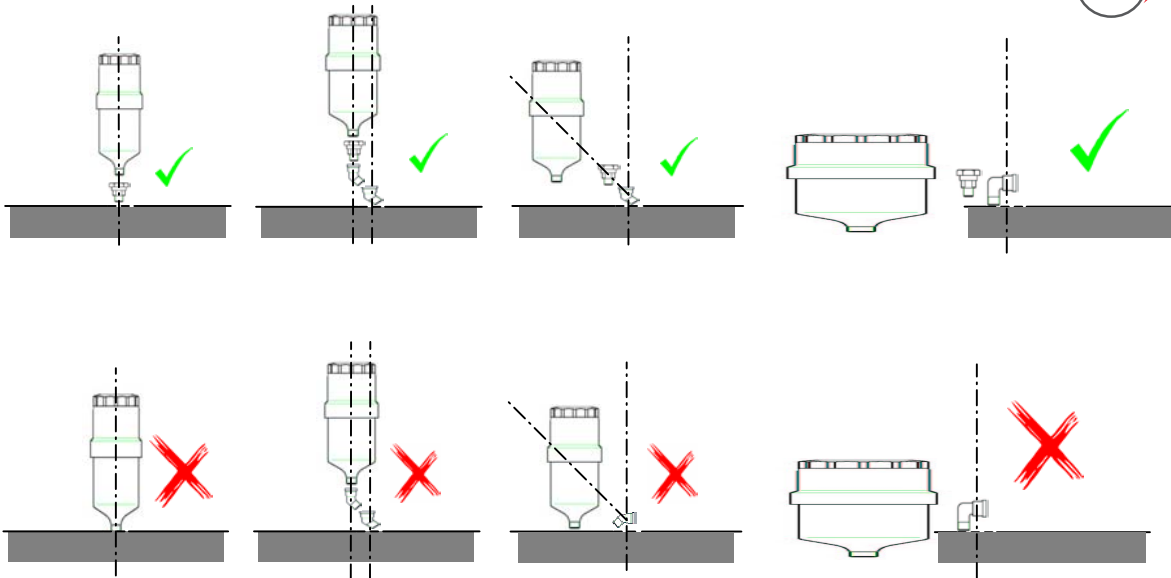
The support bracket (OKS 5710) was developed specifically to expand the range of installation options of the ChronoLube System. It offers two important functions:

- Distribution of the forces at the outlet of the ChronoLube cartridge over a larger surface. This enables installation of the ChronoLube System in applications in which high bending forces occur due to the alignment.
- The use of the support bracket prevents overtightening of the outlet thread on the ChronoLube cartridge.



The one-time purchase of a support bracket for direct installations is recommended.

In the following you see a selection of possible installation versions for direct mounting. The examples shown demonstrate both correct installation and several examples of how it should not be done.



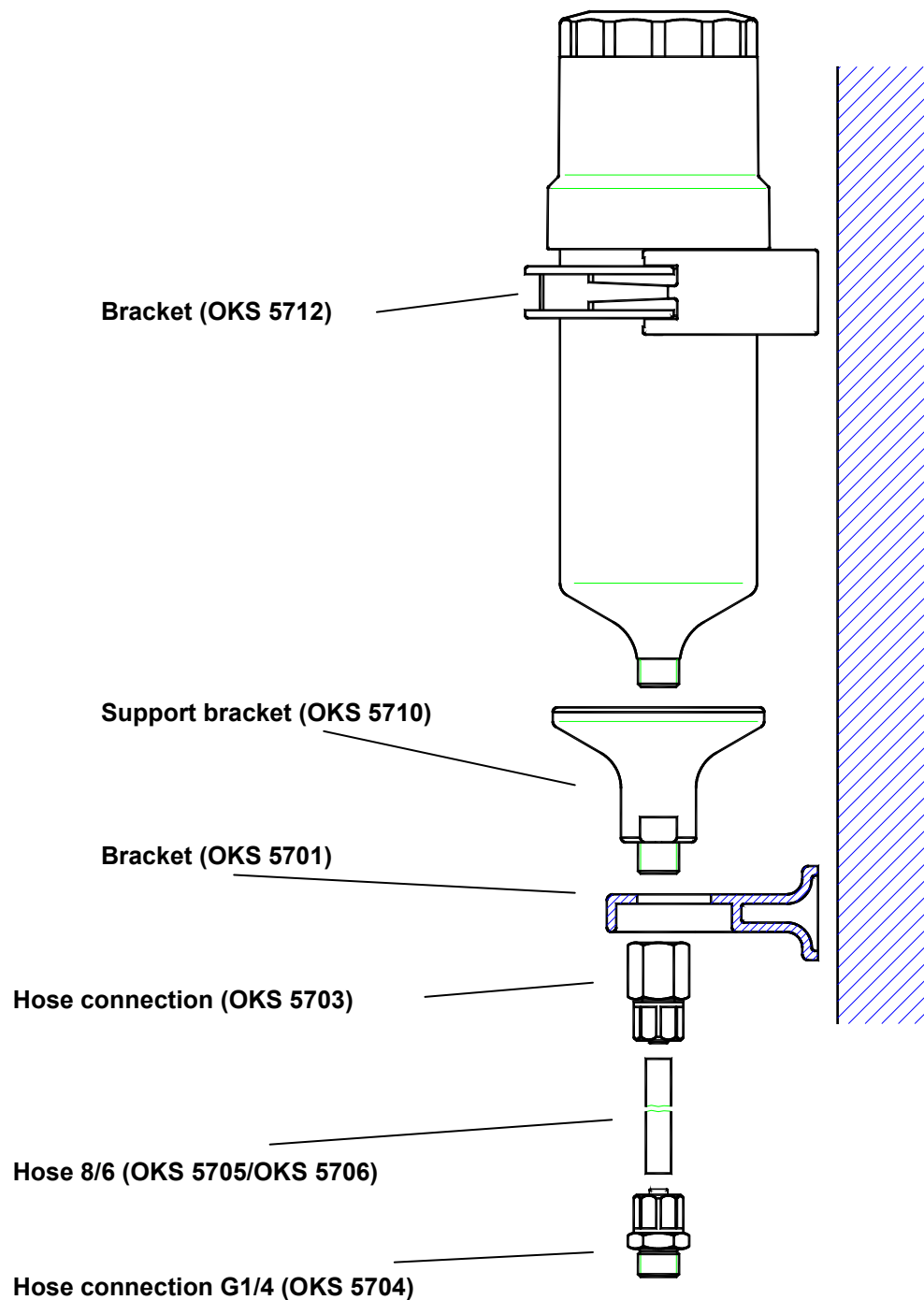
3. Guidelines for Remote Mounting

Mounting away from the lubricating point requires a lubricating line. OKS recommends a flexible hose with an 8 mm outside diameter and a 6 mm inside diameter. The hose should not be longer than 1 m. Please note that, depending on the lubricant and the temperature, approximately 1.5 bar of pressure is required per 1 meter of hose. With oil you can realize lubricating lines with a length of 3 m.

Please observe the following guidelines when installing the ChronoLube System:

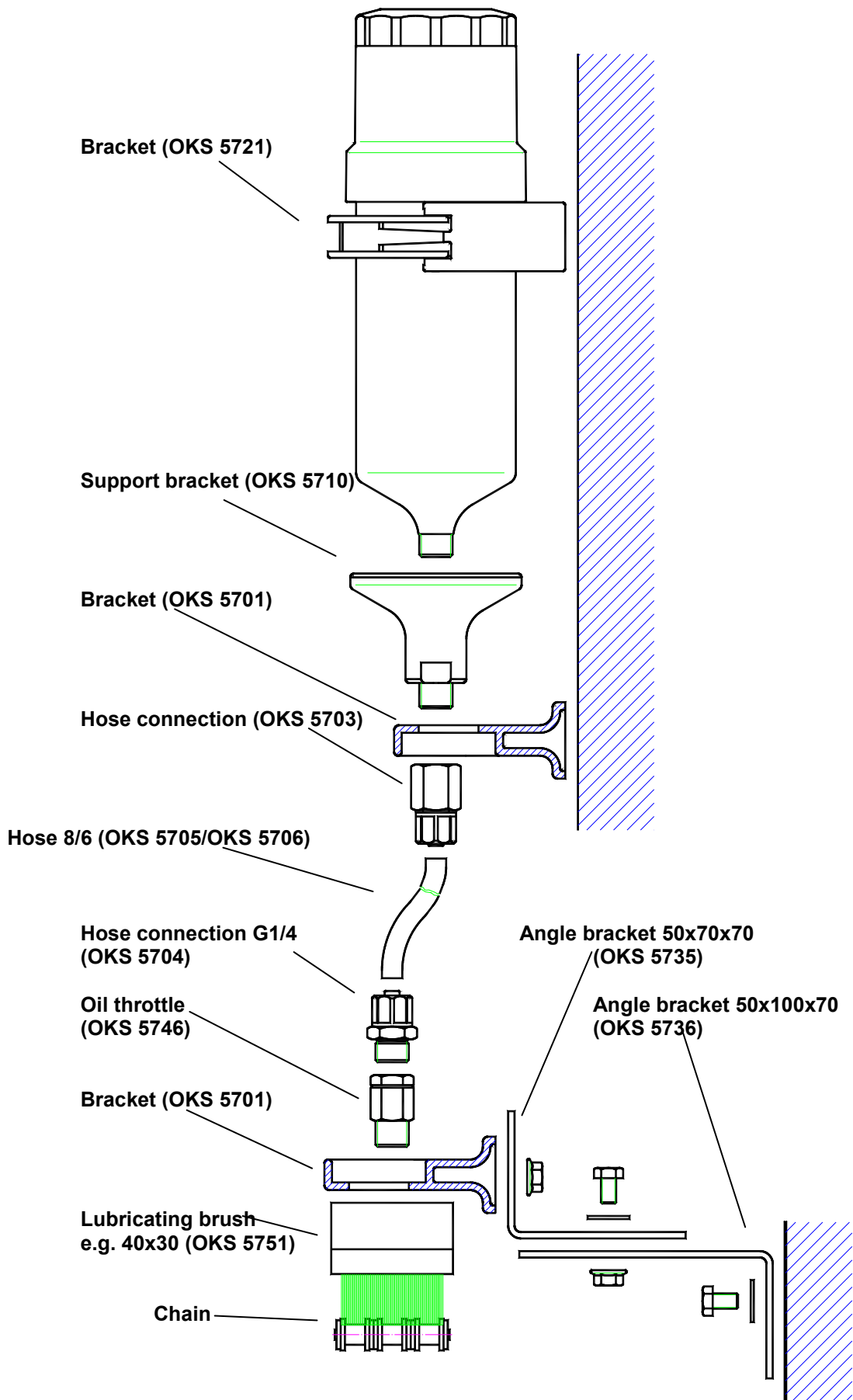
1. In the case of remote mounting, the ChronoLube System must be secured with special brackets. On the following pages you see a selection of possible installation versions for remote mounting.
2. Select a location with easy, safe access for the OKS ChronoLube System, which is at the same protected from high-pressure water jets, falling production materials, corrosive chemicals, heavy vibrations and high temperatures.
3. Pre-lubricate the lines and attached parts prior to installing the ChronoLube System with the same lubricant, with which the lubricator is filled so that all lines are already completely filled with lubricant.
4. Secure the grease lines with cable clips or similar aids to protect them from damage.
5. When using oil as a lubricant, an oil throttle (OKS 5746) must be mounted, which prevents the lubricant from running out of the ChronoLube System. Depending on the application, the position of the oil throttle must be selected so that no lubricant can escape from the hose when changing the ChronoLube cartridge. The ChronoLube System must be installed vertically (outlet at bottom).

Grease lubrication with hose

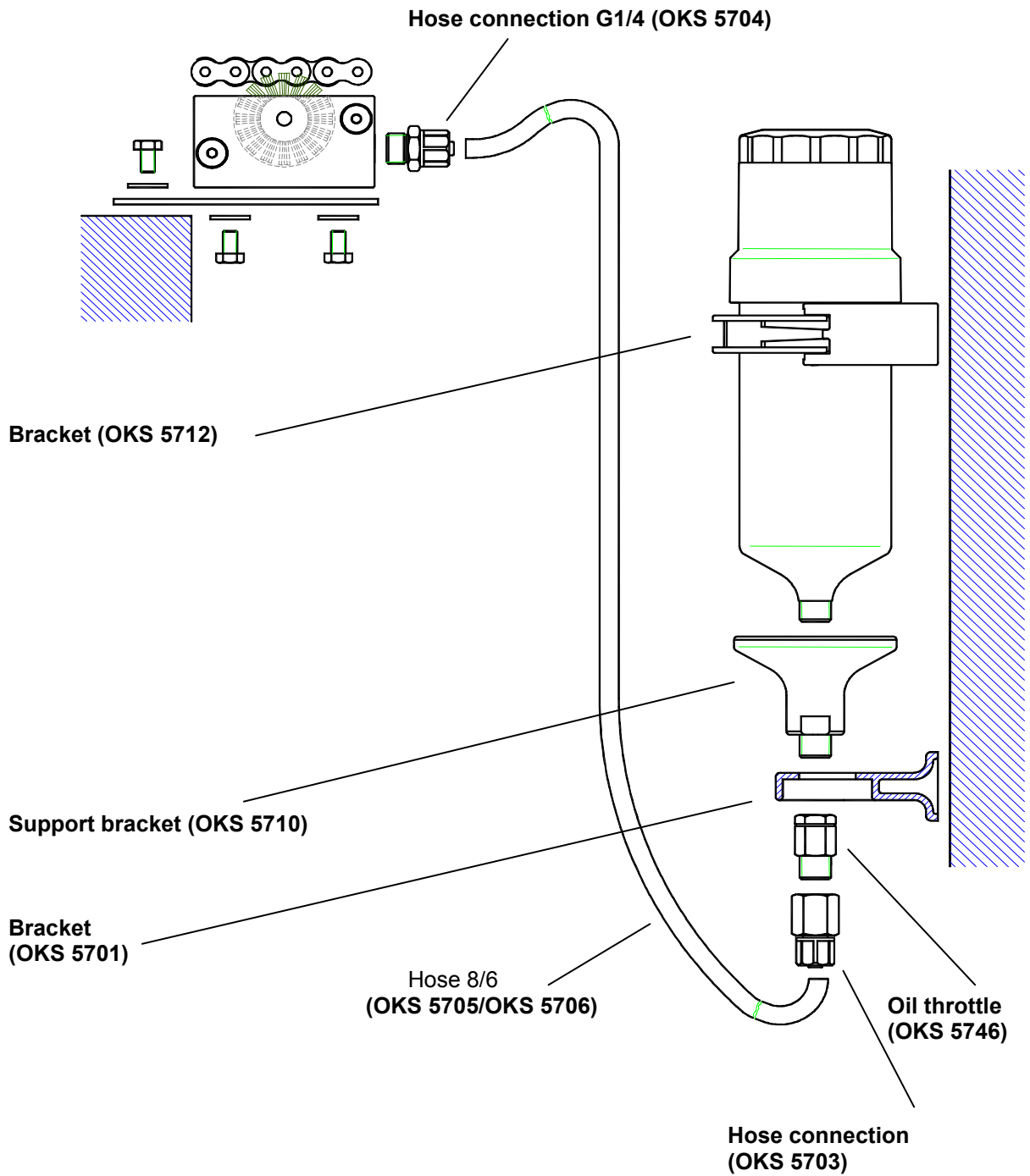


When using retaining clips other than the clip OKS 5712, make sure that the ChronoLube cartridge is not crushed. This could lead to the piston being blocked.

Oil lubrication of a chain from above



Oil lubrication of a chain lying on top



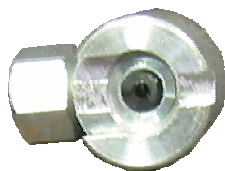
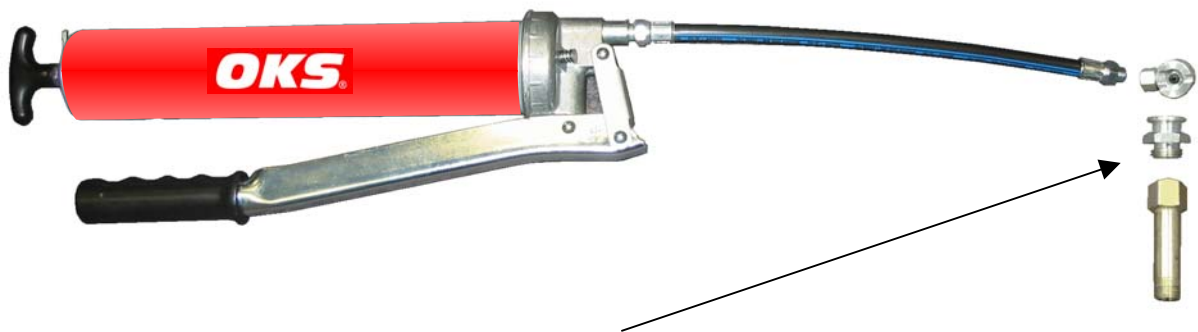
4. Pre-Filling Attached Parts/Hoses

As pointed out in points 2.4 and 3.3, all attached parts and hoses should be pre-filled. Without pre-filling of the attached parts or the hoses, the ChronoLube System would initially not feed any lubricant to the lubricating points, but instead the attached parts would have to be filled first. Approximately 28 cm³ is required for 1 meter of hose.

Example calculation:

With an annual setting of the 120 cm³ ChronoLube cartridge, the ChronoLube System requires 3 months to fill a hose with a length of 1 meter.

The following photos show one option for pre-filling using commonly available parts for a side-lever grease gun with a M10 x 1 connection thread.



Disk nipple for side-lever grease gun



Disk nipple 1/4"



Extension
(e.g. OKS 5760 /
OKS 5761 /
OKS 5702)

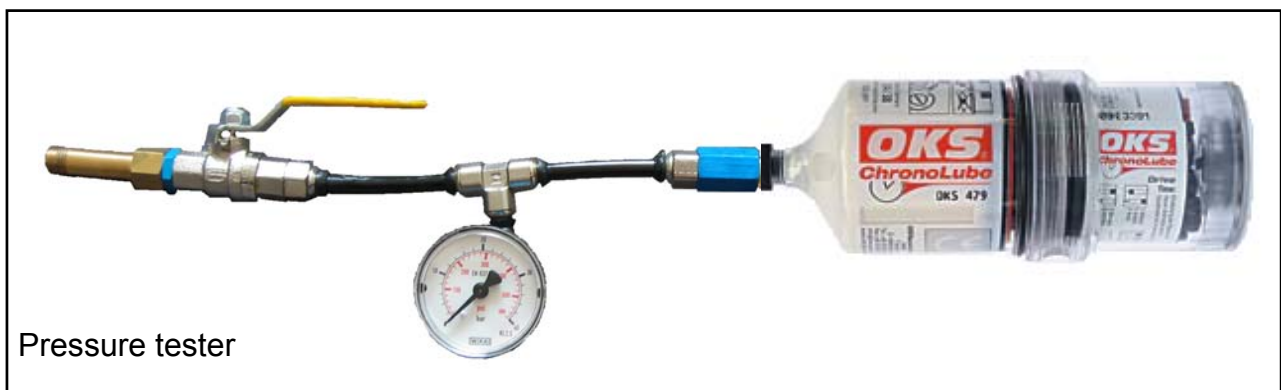
5. Prior to Commissioning

The OKS ChronoLube System is equipped with a self-protection mechanism, which switches off the drive at an increased counter-pressure (5 bar).

A pressure of 0.5 to 2 bar is required (without hose, extension, elbow etc.) for most bearings.

Before the ChronoLube System is installed, the counter-pressure of the application should therefore be checked as described in the following.

Required equipment (see picture below):



The pressure tester can be purchased from OKS.

Please make sure that the same lubricant you have selected for the application is also used in the pressure tester .

Using the pressure tester:

1. Clean the lubricating point to prevent possible soiling.
2. Remove the grease nipple.
3. Mount the required reduction, extension, hose etc. if necessary.
4. Screw the pressure tester into your lubricating point.
5. The best measuring results are achieved with the application running.
6. The valve on the pressure tester must be open.
7. Press the small black switch on the PCB of the pressure tester for approximately 20 sec. while watching the pressure gauge. Repeat the procedure until no further pressure change can be recognized on the pressure gauge. Wait approx. 5 minutes until the system has relaxed and then carry out one stroke again with a **maximum of 5 sec**. Now you have determined the system pressure and the counter-pressure of your application.
8. If the counter-pressure is 5 bar or higher, you should flush the lubricating point with a mechanical grease gun. If the counter-pressure does not decrease, you require a different lubricant or lubricator.
Please contact the Technical Service Department of OKS directly so that we can help you find a solution to your problem.