

The powerful and flexible lubrication system

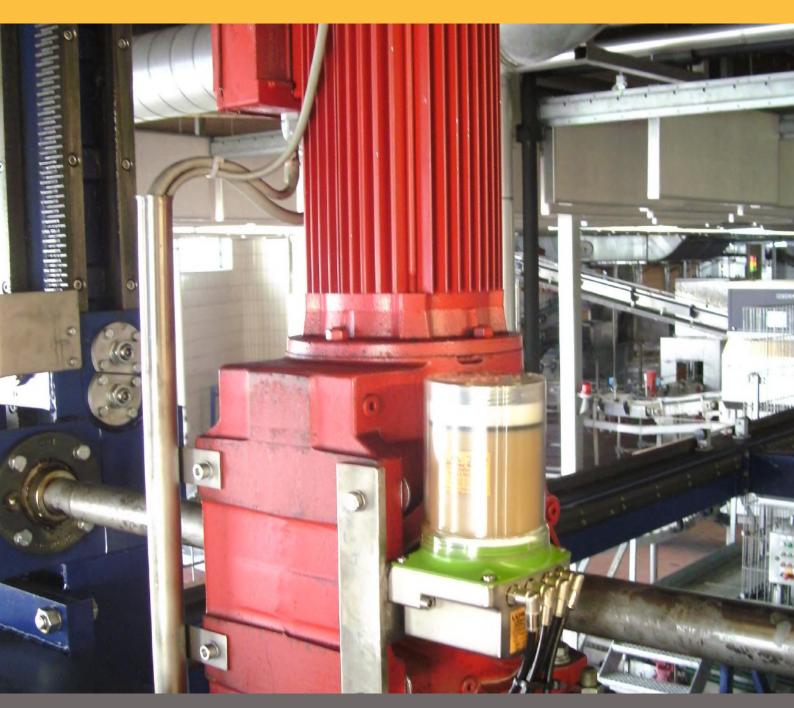


Lubrication of
Bearings
Chains
Open tooth systems
Linear guides











Gruetzner GmbH



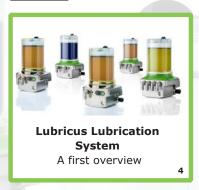




Lubricus lubrication system - innovative, flexible, adaptable!

Lubricus offers a new portal to the world of automatic lubrication. With the highly versatile Lubricus lubrication system, both single lubrication points and a whole group of varied points can be provided with lubricant continuously over a long period of time.

Content

















Lubricus - the adaptive and compact lubrication system

The Lubricus lubrication system can supply up to 16 lubricating points - either autonomously in battery mode or via an external power supply.

Flexible lubrication

The Lubricus lubrication system is an extremely compact lubrication unit for oils and greases up to NLGI class 2. The lubrication system works either autonomously with a battery back or using an external voltage supply (24VDC).

Dependent on the version, the Lubricus has up to four outlets and is thus optimally suited for uses with multiple lubricating points.

The Lubricus is suitable for the simple and reliable supply of lubrication to bearings, linear guides, chains and open tooth systems, for which special lubricating pinions and lubricating gearwheels are available.

Due to the compact dimensions, the Lubricus is optimally suited for upgrades or retrofitting.



LUBRICUS

- ♦ Transport of oil and grease up to NLGI-class 2
- **♦** Connection to machinery control possible
- Delivery pressure up to 70 bar (1015 psi)
- ♦ Operating temperature range -20°C to +70°C
- ♦ Temperature-independent feed rate
- **♦** Visual inspection possible at any time
- Simple operation

Quick Check

During operation Lubricus measures the back-pressure at the lubricating point. The result is output to the display in just a few seconds - simple and without any additional effort.







Lubricus B and Lubricus V

The most simple variants of the Lubricus lubrication system are the Lubricus B (battery) and the Lubricus V (24 VDC). Both are available with either one or two outlets and can reliably provide lubrication points with lubricant for up to 36 months.

LUB-B-1 and LUB-B-2

The battery-operated variant of the Lubricus lubrication system is always used when an autarchic operation is desired or necessary. The highly-efficient battery pack can optionally be set to empty the lubricant cartridge over a period of 1–36 months.

Product details:

- 1 or 2 outlets, 70 bar supply pressure
- LCD display with LED
- Quick-check (back-pressure readings)

LUB-V-1 and LUB-V-2

The 24V variant of the Lubricus lubrication system is always the right choice when a power supply can be simply attached. The LUB-V's strengths become particularly apparent during discontinuous operation.

Product details:

- 1 or 2 outlets, 70 bar supply pressure
- LCD display with LED
- Error readouts possible
- Quick-check (hack-pressure readings)

LUB-B-1/2 and LUB-V-1/2

| Art-No. | | Outlets | Power supply | Temperature range | Cartridge volume | Dialogue Display |
|---------|-----------------------------|---------|--------------|-------------------|---------------------|---------------------|
| LUB-B-1 | Lubricus Lubrication System | 1 | Bat. 3.0V | -20°/+70° | 400cm ³ | Х |
| LUB-B-2 | Lubricus Lubrication System | 2 | Bat. 3.0V | -20°/+70° | 400cm ³ | X |
| LUB-V-1 | Lubricus Lubrication System | 1 | 24 VDC | -20°/+70° | 400cm ³ | Х |
| LUB-V-2 | Lubricus Lubrication System | 2 | 24 VDC | -20°/+70° | 400cm ³ | Х |







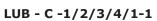
Lubricus C and Lubricus Controller

The Lubricus controller is used for external monitoring of the Lubricus, to which up to four Lubricus lubrication systems (4 outlets each = 16) can be connected.

The connected Lubricus lubricating devices can be individually controlled and monitored using the Lubricus Controller. The dialogue takes place via a simple to operate LCD display.

Benefits:

- Lubricating units are attached close to the actual lubricating points
- Central monitoring is possible (e.g. PLC)
- ▲ Individual supply volumes possible
- Monitoring of up to 16 lubrication points
- Electronics and monitoring components can be installed in a user-friendly environment

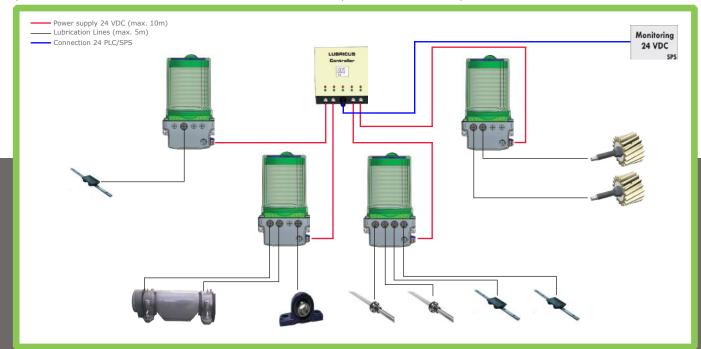


| Art-No. | | Outlets | Power supply | Temperature range | Cartridge volume | Dialogue Controller |
|-----------|-----------------------------|---------|--------------|-------------------|---------------------|------------------------|
| LUB-C-1 | Lubricus Lubrication System | 1 | 24 VDC | -20°/+80° | 400cm ³ | X |
| LUB-C-2 | Lubricus Lubrication System | 2 | 24 VDC | -20°/+80° | 400cm ³ | X |
| LUB-C-3 | Lubricus Lubrication System | 3 | 24 VDC | -20°/+80° | 400cm ³ | X |
| LUB-C-4 | Lubricus Lubrication System | 4 | 24 VDC | -20°/+80° | 400cm ³ | X |
| LUB-C-1-1 | Lubricus Lubrication System | 2 | 24 VDC | -20°/+80° | 400cm ³ | Х |

Lubricus Controller

| Art-No. | | Application | Power supply | Temperature range | Connector | Output to Lubricus |
|---------|---------------------|-------------------|--------------|-------------------|-----------|-----------------------|
| LUB-CE | Lubricus Controller | System monitoring | 24 VDC | -20°/+80° | M12 x 1 | M8 x 1 |

Installation example: The Lubricus Controller monitors and controls four Lubricus lubricating devices, which in turn supply a varying number of lubricating points. The paths, which the lubricant must travel over in the lines, can be kept simple and short, nevertheless central monitoring takes place via the Lubricus Controller. The installation and maintenance requirements are sustainably reduced.









Lubricus D

Lubricus Type D is designed for an external control and 24 VDC voltage supply. Depending on the model, the Lubricus lubrication system type D has 1, 2, 3 or 4 outlets. A connection to the PLC is required.

LUB-D-1/2/3/4/1-1

The Lubricus D is particularly suited for units in which lubrication must be synchronised with the operating period of the machine, or where specific lubrication cycles at prescribed intervals are needed. The feed pump in the Lubricus D provides lubricant to the outlets via PLC according to the activation of pump outputs. In this way a highly precise dose amount of lubricant can be obtained. The user has the highest possible degree of control over the frequency of lubrication and the size of the lubricant dose.

Product details:

- 1, 2, 3 or 4 outlets, 70 bar supply pressure
- flexible, individual volume assignment
- feedback to the connected unit
- exact control and lubricant dosing

LUB - D -1/2/3/4/1-1

| Art-No. | | Outlets | Power supply | Temperature range | Cartridge volume | Dialogue PLC |
|-----------|------------------------------------|---------|--------------|-------------------|---------------------|-----------------|
| LUB-D-1 | UB-D-1 Lubricus Lubrication System | | 24 VDC | -20°/+70° | 400cm ³ | X |
| LUB-D-2 | Lubricus Lubrication System | 2 | 24 VDC | -20°/+70° | 400cm ³ | X |
| LUB-D-3 | Lubricus Lubrication System | 3 | 24 VDC | -20°/+70° | 400cm ³ | X |
| LUB-D-4 | Lubricus Lubrication System | 4 | 24 VDC | -20°/+70° | 400cm ³ | X |
| LUB-D-1-1 | Lubricus Lubrication System | 2 | 24 VDC | -20°/+70° | 400cm ³ | X |



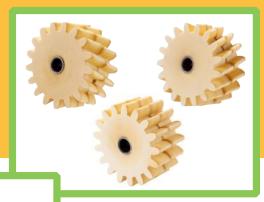




Lubricating gearwheel

Lubrication of open tooth systems

Optimal supply of tooth systems is ensured over very long periods using the Lubricus lubricating gearwheel. The Lubricus lubricating system provides a variable lubricant supply.



Lubricating gearwheel

The lubricant passes through the axle and appropriate holes in the foam material. With just a low pressing pressure, the stored lubricant is released again. The PU foam used (open-cell) stores the lubricant and releases it again in very small dosing quantities. In this way, over lubrication is effectively prevented, as is possible wear caused by a lack of lubrication.

The lubricating gearwheels are available with both straight as well as sloping right/ sloping left teeth (module 2-30). From a width of 20 mm, the lubricating gearwheel is comprised of several segments.

Different fastening axles are available for the lubricating gearwheels. Dependent on the installation or supply of lubricant, right-angled or straight axles can be used.



Technical Data

Material: Polyurethane foam, open-celled Operating temp. range: -30°C to +150°C Speed at the surface: max. 5m/s

Density: 240 kg/m3

Application: suitable for oil and grease if requested tempered version also available

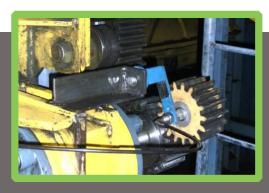
Lubrication gearwheels for Lubricus

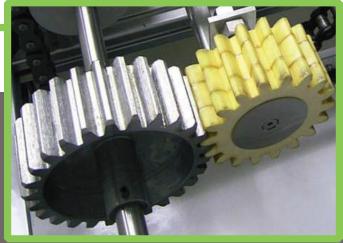
| Art-No. | | Gear tooth system | Module | width mm |
|----------|-----------------------|----------------------|--------|----------|
| LAT-SZ-G | Lubrication gearwheel | straight | 2-10 | 20-100 |
| LAT-SZ-L | Lubrication gearwheel | sloping left rising | 2-10 | 20-100 |
| LAT-SZ-R | Lubrication gearwheel | sloping right rising | 2-10 | 20-100 |

You can find a detailed overview of all sizes and modules in the accessory range on p. 11 other sizes available upon request.



Securing axles for lubricating gearwheels straigh or right-angled







Chain lubricating pinion

Lubrication of chains

As with the lubricating of gearwheels, the lubricant passes through the axle and corresponding holes into the foam material, the pinion ensures quiet running.



Technical Data

Material: Polyurethane foam, open-celled Operating temp. range: -30°C to +150°C Speed at the surface: max. 5m/s

Density: 240 kg/m3 Application: suitable for oil

if requested tempered version also available

Chain lubricating pinion for Lubricus

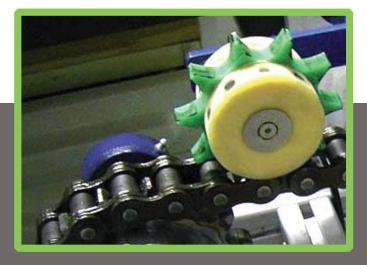
| Art-No. | | ISO-No. | p [inch] |
|------------------------------|------------------------------|------------|-------------|
| LAT-KR-08 | LAT-KR-08 Lubricating pinion | | 1/2 x 5/16 |
| LAT-KR-10 | LAT-KR-10 Lubricating pinion | | 5/8 x 3/8 |
| LAT-KR-12 Lubricating pinion | | 12 B-1/B-2 | 3/4 x 7/16 |
| LAT-KR-16 Lubricating pinion | | 16 B-1/B-2 | 1 × 17 |
| LAT-KR-20 Lubricating pinion | | 20 B-1/B-2 | 1 1/4 × 3/4 |
| LAT-KR-24 Lubricating pinion | | 24 B-1/B-2 | 1 1/2 x 1 |
| LAT-KR-32 | Lubricating pinion | 32 B-1/B-2 | 2 x 1 1/4 |

Chain lubricating pinion

The rollers from open-celled PU foam transfer the lubricant in a point-wise manner to the surfaces of the lugs of roller chains. The mechanical force to drive the rollers is ensured by a low-wear plastic pinion.

The chain lubricating pinions are, dependent on size, available for simplex and duplex chains.

The optimal contact pressure of the lubricating pinion can be individually adjusted using a tensioning element. The tensioning element can also be used for a sprung positioning of the lubricating gearwheel.





Lubricus - Technical Information and lubricants

The Lubricus Lubrication System can be employed in a variety of settings and is equally effective for the safe, automatic lubrication of roller and slide bearings, gear racks, open gearboxes or chains. The Lubricus lubricant cartridge is available with various standard lubricants, with special fillings available on request.



| Info | Details |
|-----------------------------------|--|
| Lubrication volume | 400 cm ³ in a rigid, disposable cartridge |
| Lubricant type | Oil or grease up to NLGI 2 |
| Operating pressure | Max. 70 bar |
| Operating period per cartridge | 1-36 months |
| Dose volume per stroke | 0.15cm ³ |
| Dose amount per lubrication cycle | 0.15 to 4.5cm³ |
| Connection | Tube with 6mm outer-diameter |
| Dimensions, max., W x H x D | 1,120 g |
| Abmessungen | 112 x 196 x 94mm |





Lubricants for Lubricus - standard fillings

| Art-No. | | Application | Temperature range | Thickener | NLGI Class | Base oil | to DIN 51502 |
|----------|--------------------|---|----------------------|-----------|---------------|-------------|-----------------|
| LUB-KA01 | Lubricus Cartridge | Multipurpose grease | -20°/+120° | Li/Ca | 2 | Min. | KP2K-30 |
| LUB-KA02 | Lubricus Cartridge | Multipurpose with MoS2 | -30°/+140° | Li | 2 | Synth. | KPF2N-30 |
| LUB-KA03 | Lubricus Cartridge | High temperature grease | -40°/+160° | PHS | 2 | PAO | KHCP2P-40 |
| LUB-KA06 | Lubricus Cartridge | Semi-fluid grease | -40°/+110° | Li/Ca | 0 | Min. | KP0G-40 |
| LUB-KA07 | Lubricus Cartridge | Heavy duty grease | -30°/+150° | Li/Ca | 0-1 | Min. | OGPON-30 |
| LUB-KA09 | Lubricus Cartridge | Biodegradable grease | -40°/+120° | Li/Ca | 2 | Ester | KEP2K-40 |
| LUB-KA10 | Lubricus Cartridge | Food Industry grease (reg NSF-H1 No. 138985) | -20°/+160° | Al | 1 | Min. | KP1P-20 |
| LUB-KA14 | Lubricus Cartridge | Multipurpose oil | -10°/+90° | - | - | Min. | |
| LUB-KA15 | Lubricus Cartridge | High temperature oil | -20°/+250° | - | - | Ester | |
| LUB-KA64 | Lubricus Cartridge | Biodegradable oil | -20°/+100° | - | - | Synth. | |
| LUB-KA70 | Lubricus Cartridge | Food Industry oil (reg NSF-H1 No. 127130) | -30°/+100° | - | - | Synth. | |

Special fillings on request



Lubricus accessories

| | Description | Art. No. | | Description | Art. No. |
|---|--|---|-------|---|---|
| | Threaded fitting for hose Ø 6 mm, straight M5 M6 M6x0,75 M8x1 M10x1 1/8" 1/4" | LAT 7097 LAT 7084 LAT 7085 LAT 7086 LAT 7087 LAT 7076 LAT 7079 | | Simplex chain lubricating pinion incl. fastening axle Thread: M6/M10 ISO-Nr. p [inch] 08 B-1 1/2 x 5/16 10 B-1 5/8 x 3/8 12 B-1 3/4 x 7/16 16 B-1 1 x 17 20 B-1 1 ¹ / ₄ x 3/4 24 B-1 1 ¹ / ₂ x 1 32 B-1 2 x 30,99 | LAT-KR-S-08 LAT-KR-S-10 LAT-KR-S-12 LAT-KR-S-16 LAT-KR-S-20 LAT-KR-S-24 LAT-KR-S-32 |
| | Threaded fitting for hose Ø 6 mm, knee type M5 M6 M6x0,75 M8x1 M10x1 1/8" 1/4" | LAT 7097G LAT 7084G LAT 7085G LAT 7086G LAT 7087G LAT 7076G LAT 7079G | | Duplex chain lubricating pinion incl. fastening axle Thread: M6/M10 ISO-Nr. p [inch] 08 B-2 1/2 x 5/16 10 B-2 5/8 x 3/8 12 B-2 3/4 x 7/16 16 B-2 1 x 17 | LAT-KR-D-08 LAT-KR-D-10 LAT-KR-D-12 LAT-KR-D-16 |
| | Bulkhead coupling 25 mm, incl. 1 Nut 60 mm, incl. 2 Nuts brass nickel-plated | LAT 7045 LAT 7046 | 4 | Tensioning element for chain lubricating pinion Deflection: max. 50mm Tensioning force: 350N For M6 axle For M10 axle | LAT-SP-10 LAT-SP-16 |
| | Hose Ø 6/4 mm, plastic per meter unfilled filled with universal grease Tube cutter | LAT 8002 LAT 8002-01 | | Lubricating gearwheel PU foam, open-celled Toothing: straight Module 2 (width 20mm) Module 3 (width 30mm) Module 4 (width 40mm) Module 5 (width 50mm) Module 6 (width 60mm) | LAT-SZ-G-2 LAT-SZ-G-3 LAT-SZ-G-4 LAT-SZ-G-5 |
| | 12mm, for Lubricus high-pressure hose Brush plastic bristles ø 25x45 mm | LAT 8034 | | Module 8 (width 80mm) Module 10 (width 100mm) Module 12 (width 120mm) Toothing: sloping right Module 2 (width 20mm) Module 3 (width 30mm) Module 4 (width 40mm) | LAT-SZ-G-6 LAT-SZ-G-8 LAT-SZ-G-10 LAT-SZ-G-12 LAT-SZ-R-2 LAT-SZ-R-3 LAT-SZ-R-4 |
| | Brush horse hair bristles ø 28x15 mm plastic | LAT 8041 | | Module 5 (width 50mm) Module 6 (width 60mm) Module 8 (width 80mm) Module 10 (width 100mm) Toothing: sloping left Module 2 (width 20mm) Module 3 (width 30mm) Module 4 (width 40mm) | LAT-SZ-R-5 LAT-SZ-R-6 LAT-SZ-R-8 LAT-SZ-R-10 LAT-SZ-L-2 LAT-SZ-L-3 LAT-SZ-L-4 |
| | Brush 40 mm 70 mm 100 mm 25 mm Aluminium | LAT 8035 LAT 8036 LAT 8037 LAT 8038 | Mason | Module 5 (width 50mm) Module 6 (width 60mm) Module 8 (width 80mm) Module 10 (width 100mm) Fastening axle Straight, rust-free steel | LAT-SZ-L-4 LAT-SZ-L-5 LAT-SZ-L-6 LAT-SZ-L-8 LAT-SZ-L-10 |
| | Brush, lateral connection 40 mm 70 mm 100 mm Aluminium | LAT 8035s LAT 8036s LAT 8037s | | Fastening: M10/M16 Module 2 (width 20mm, M10) Module 3 (width 30mm, M10) Module 4 (width 40mm, M10) Module 5 (width 50mm, M16) Module 6 (width 60mm, M16) Module 8 (width 80mm, M16) Module 10(width 100mm, M16) Module 12(width 120mm, M16) | |
| operating temperature range: +10 bis +90°C | Splitter, uniform division Splitter for grease 2-way, straight 3-way, straight 4-way, straight Splitter for oil 2-way, straight 3-way, straight 4-way, straight | LAT-Split-2 LAT-Split-3 LAT-Split-4 LAT-Split-20 LAT-Split-30 LAT-Split-40 | | Fastening axle Angled, rust-free steel Fastening: M8, Conn. M10x1 Module 2 (width 20mm) Module 3 (width 30mm) Module 4 (width 40mm) Module 5 (width 50mm) Module 6 (width 60mm) Module 8 (width 80mm) Module 10 (width 100mm) Module 11 (width 120mm) | LAT-A-2G LAT-A-3G LAT-A-4G LAT-A-5G LAT-A-6G LAT-A-8G LAT-A-10G LAT-A-12G |
| | Progressive distributor for grease and oil progressive distributor 2-way progressive distributor 3-way progressive distributor 4-way progressive distributor 5-way progressive distributor 6-way progressive distributor 7-way progressive distributor 8-way | LAT-PRV-3 LAT-PRV-4 LAT-PRV-5 LAT-PRV-6 LAT-PRV-7 | | Cable Plug M12x1, M8x1 (Contr.) Can be used with drag chain 5m M12x1, open end 10m M12x1, open end 5m M12x1, outlet M8x1 10m M12x1, outlet M8x1 5m M12x1, LED 10m M12x1, LED M8x1 plug-connection 4 ping | LAT-WI-0-5 LAT-WI-0-10 LAT-WI-8-5 LAT-WI-8-10 LAT-WI-ED-5 LAT-WI-LED-10 LAT-WIS-8-4 |
| | Battery for Lubricus Replace with each cartridge LI-Battery 3.0 V | LAT-BAT-L | 7/4 | Power supply unit 230V/24VDC connecting cable with plug (Europe version) | LAT-8080 |

Modern lubrication technology

Intelligent lubrication systems

ffcontbleinmovativesingblepointtlibbidattortto powerful multi-point systems -



Sololube - safe automatic lubrication!

Sololube is a reliable, easy-to-operate lubricant dispenser with an electromechanical drive. Its precise delivery system makes Sololube equally suitable for the automatic lubrication of:

- roller and friction bearings
- gear racks
- open transmissions or
- chains

SOLOLUBE

- Precise, reliable delivery of lubricant
- Delivery pressure 7.5 bar
- Visual warning of malfunction (LED)
- Dispensing period 1-12 months
- Operating temperature -20°C to +60°C
- Can be used outdoors
- Independent of temperature
- Hose up to 2.5m long
- Special fillings available
- easy to operate
- Visual check possible at all times easy to operate





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