

# Automatic grease dispensing tools

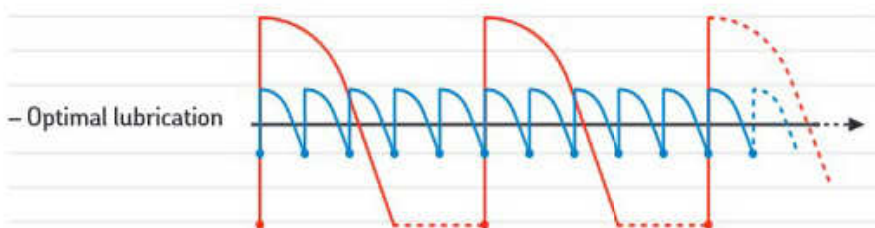
## Improve cleanliness, accuracy, safety and reliability

Performing manual relubrication tasks can be a major challenge for lubrication technicians if the appropriate tools, practices and knowledge are not employed. Reliability can also be affected by under- or over-greasing and contamination. Automatic lubrication provides small quantities of clean lubricant on a regular basis, thus improving bearing performance. Additional benefits include increased safety and time savings for lubrication technicians.

## Main benefits of automatic lubrication

### Reduce the risks of failure

– Over-greased = overheating, waste and pollution



– Under-greased = wear, premature repairs, high repair costs

— Manual lubrication

— Automatic lubrication

SKF has used its lubrication expertise to develop suitable lubrication systems that properly feed lubrication points, thereby creating synergy between SKF lubricants and SKF lubrication systems.

The SKF lubrication systems portfolio provides a comprehensive range of products from user friendly and cost-effective single point automatic lubricators to complete centralised lubrication systems engineered for specific application(s).

The whole range of products is built so that every new product offers:

- Further installation distance from the lubrication point: important for reduced spaces or high vibrations
- Enhanced monitoring/control possibilities: highly valuable for critical applications that deserve constant monitoring or machine steering
- Multiple points: when several lubrication points have similar conditions, multipoint lubricators provide an ideal solution

### What automatic lubrication can do for you



#### Optimisation of:

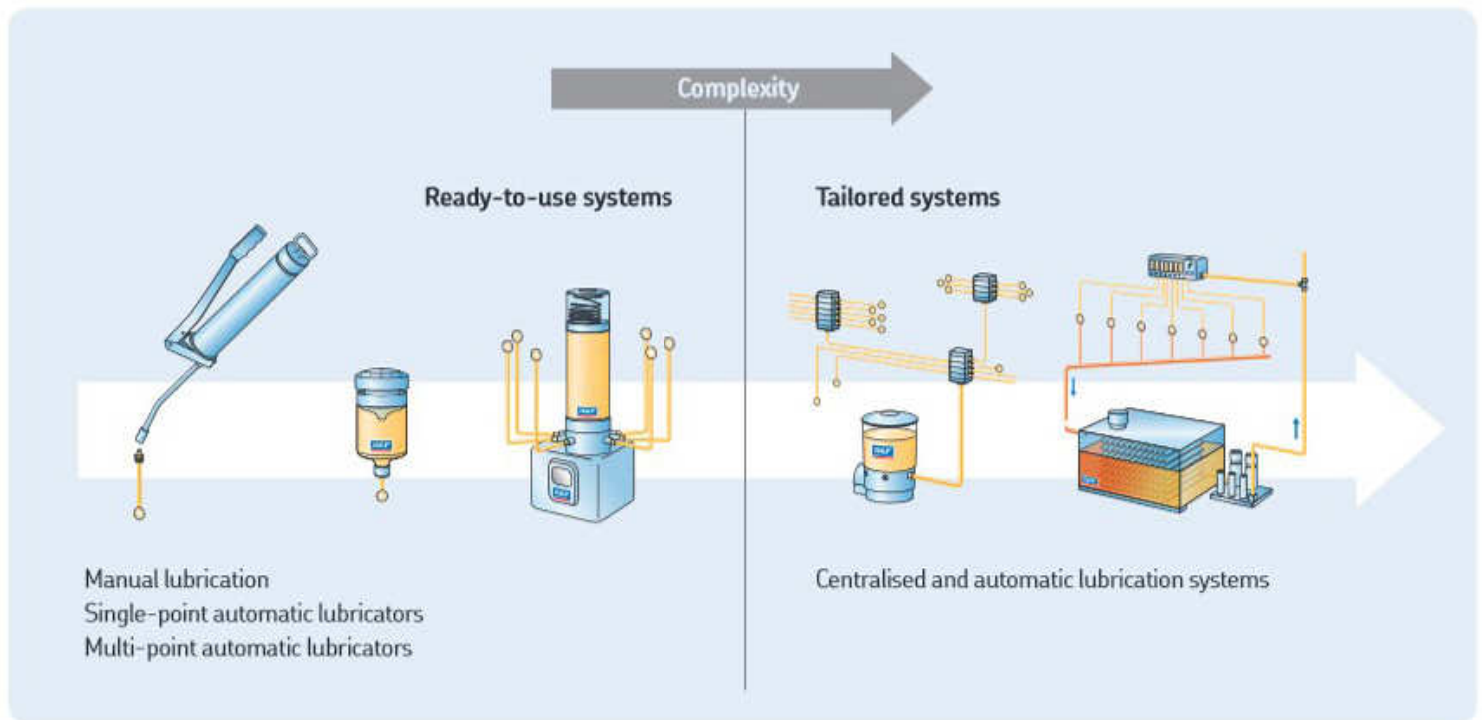
- Machine performance
- Quantities and frequencies
- Accuracy
- Safety
- Time consumption

#### Minimisation of:

- Lubricant consumption
- Spillage
- Contamination risk
- Human errors
- Failures



# Overview of lubrication methods



## Selection chart – Automatic lubricators

	SKF SYSTEM 24	SKF SYSTEM 24			
<b>Designation</b>	SKF LAGD series	SKF TLSD series	SKF TLMR series	LAGD 400	LAGD 1000
<b>Number of points</b>	1	1	1	1 to 8	6 to 20
<b>Container capacity</b>	60 ml (2 US fl. oz) and 125 ml (4.2 US fl. oz)	125 ml (4.2 US fl. oz) and 250 ml (8.5 US fl. oz)	120 ml (4.1 US fl. oz) and 380 ml (12.8 US fl. oz)	400 ml (13.5 US fl. oz)	1 000 ml (33.8 US fl. oz)
<b>Power Supply</b>	Electrochemical gas generation	Batteries	Battery/DC	DC/AC	DC/AC
<b>Maximum feed line</b>	<0,3 m (0.1 ft)	<3 m (10 ft)	5 m (16 ft)	5 m (16 ft)	6 m (19.7 ft)
<b>Temperature range</b>	-20 to +60 °C (-5 to +140 °F)*	0 to 50 °C (32 to 120 °F)	-25 to +70 °C (-13 to +158 °F)	0 to 50 °C (30 to 120 °F)	DC: -25 to +75 °C (-15 to +165 °F) AC: -25 to +60 °C (-15 to +140 °F)
<b>Reusable</b>	Disposable	Replaceable container	Replaceable container	Replaceable 400 g cartridges / Refillable	Refillable
<b>Monitoring</b>	Piston displacement	LEDS	LEDS	On site / remote	On site / remote
<b>IP rating</b>	IP 68	IP 65	IP 67	IP 54	IP 65
<b>Available lubricants</b>	SKF greases and oils assortment Special fillings on request	SKF greases and oils assortment Special fillings on request	SKF greases and oils assortment	A cartridge of SKF LGMT 2 is provided. NLGI 1, 2 and 3 grease are suitable	NLGI 000 to NLGI 2

\* If the ambient temperature is constant between 40 and 60 °C (105 and 140 °F), do not select dispense rate of more than 6 months for optimum performance.

# SKF SYSTEM 24

## Gas driven single point automatic lubricators

### SKF LAGD series

The units are supplied ready-to-use straight from the box and filled with a wide range of high performance SKF lubricants. Tool-free activation and time-setting allow easy and accurate adjustment of lubrication flow.

- Flexible dispense rate from 1 to 12 months
- Stoppable or adjustable if required
- Intrinsic safety rating: ATEX approved for zone 0
- Transparent lubricant container allows visual inspection of dispense rate
- Compact size, permits installation in restrictive areas
- Greases and chain oils available

#### Typical applications

- Applications in restrictive and hazardous locations
- Bearing housing lubrication
- Electric motors
- Fans and pumps
- Conveyors
- Cranes
- Chains (oil)
- Elevators and escalators (oil)

SKF DialSet helps to calculate the correct dispense rate.



#### Easy-grip top-cover

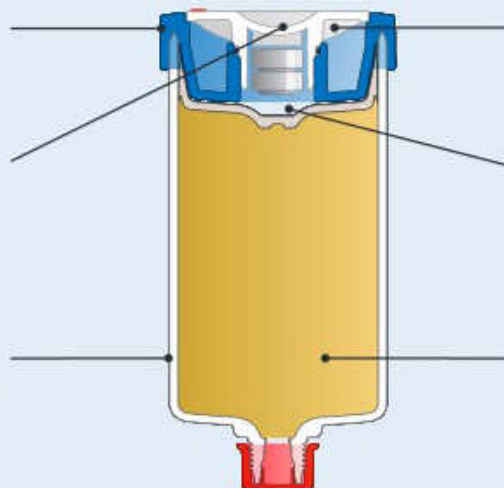
Specially designed top ring for an optimum grip

#### Gas cell

Detachable batteries for an environmentally friendly disposal

#### Lubricant container

Transparent lubricant container allows visual inspection of dispense rate



#### Toolless dial

Allows easy and accurate adjustment of flow rate

#### Piston

Special piston shape helps ensure optimum emptying of lubricator

#### SKF Lubricants

Filled with high quality SKF lubricants





### Ordering details

Grease	LGWA 2	LGEM 2	LGGB 2	LGHB 2	LGHP 2	LGFP 2	LGWM 2
Description	Multi-purpose EP type grease	High loads, slow rotations	Biodegradable	High temperature & loads, plain bearings	High performance polyurea	Food processing industry	High load, wide temperature
Unit 60 ml	LAGD 60/WA2	LAGD 60/EM2	–	LAGD 60/HB2	LAGD 60/HP2	LAGD 60/FP2	–
Unit 125 ml	LAGD 125/WA2	LAGD 125/EM2	LAGD 125/GB2	LAGD 125/HB2	LAGD 125/HP2	LAGD 125/FP2	LAGD 125/WM2

Chain oils	LHMT 68	LHHT 265	LFFM 80	LHFP 150	LFFT 220	–
Description	Medium temperature oil	High temperature oil	Food grade (NSF H1) oil	Food grade (NSF H1) oil	Food grade (NSF H1) oil	Empty unit suitable for oil filling only
Unit 60 ml	LAGD 60/HMT68*					
Unit 125 ml	LAGD 125/HMT68*	LAGD 125/HHT26*	LAGD 125/FFM80*	LAGD 125/HFP15*	LAGD 125/FFT22*	LAGD 125/U*

\* Includes non-return valve

### Technical data

**Designation** LAGD 60 and LAGD 125

<b>Grease capacity</b>	
– LAGD 60	60 ml (2 US fl. oz)
– LAGD 125	125 ml (4.2 US fl. oz)
<b>Nominal emptying time</b>	Adjustable; 1–12 months
<b>Ambient temperature range</b>	
– LAGD 60/.. and LAGD 125/..	–20 to +60 °C (–5 to +140 °F)
<b>Maximum operating pressure</b>	5 bar (75 psi) (at start-up)
<b>Drive mechanism</b>	Gas cell producing inert gas
<b>Connection thread</b>	R <sup>1</sup> / <sub>4</sub>
<b>Maximum feed line length with:</b>	
– grease	300 mm (11.8 in.)
– oil	1 500 mm (59.1 in.)

<b>Intrinsically safe approval</b>	II 1 G Ex ia IICT6 Ga II 1 D Ex ia IIIC T85°C Da I M1 Ex ia I Ma
<b>EC Type Examination Certificate</b>	Kema 07ATEX0132 X
<b>Protection class</b>	IP 68
<b>Recommended storage temperature</b>	20 °C (70 °F)
<b>Storage life of lubricator</b>	2 years
<b>Weight</b>	LAGD 125 approx 200 g (7.1 oz) LAGD 60 approx 130 g (4.6 oz) Lubricant included

Note: For optimum performance, SKF SYSTEM 24 LAGD units filled with LGHP 2 should not be exposed to ambient temperatures over 40 °C (105 °F), or have a time setting longer than 6 months. For custom fillings, contact your SKF authorised distributor.

# SKF SYSTEM 24



Electro-mechanical single point automatic lubricators

## SKF TLSD series

The SKF TLSD series is the first choice when a simple and reliable automatic lubricator is required under variable temperatures, or when the application conditions (such as vibration, limited space or hazardous environments) require a remote mounting.

- Filled with SKF Lubricants especially developed for bearing applications
- Temperature independent dispense rate
- Maximum discharge pressure of 5 bar over the whole dispensing period
- Dispense rate available in various settings
- Transparent reservoir allows visual inspection
- Red-yellow-green LEDs indicate the lubricator's status
- Refill sets include battery pack
- Special product version offering for cold conditions
- Supplied with support flange for enhanced sturdiness
- Suitable for both direct and remote installation

### Typical applications

- Critical applications where extreme reliability and additional monitoring is required
- Applications in restrictive and hazardous locations
- Applications requiring high volumes of lubricant

SKF DialSet helps to calculate the correct dispense rate.



- A** The unit can be programmed to dispense lubricant in 1, 2, 3, 4, 6, 8, 9, 10 and 12 month settings.
- B** The same drive unit can be used with both cartridge versions by simply adjusting the 125/250 ml switch.
- C** Traffic light LEDs are visible from all sides because of the presence of dual LEDs on the sides of the lubricator. The meaning of the lights is as follows:
  - Green light: The lubricator is properly functioning.
  - Yellow light: The lubricator is still functioning, but soon some action will be required. Yellow light serves as a pre-warning light.
  - Red light: The lubricator stopped operating.



## Ordering details <sup>1)</sup>

Grease	LGWA 2	LGEM 2	LGHB 2	LGHP 2	LGFP 2	LGWM 2
Description	High load, extreme pressure, wide temperature range	High viscosity bearing grease with solid lubricants	High load, high temperature, high viscosity	High performance, high temperature	Food compatible NSF H1 certified	High loads, wide temperature
Complete unit 125	TLSD 125/WA2	TLSD 125/EM2	TLSD 125/HB2	TLSD 125/HP2	TLSD 125/FP2	TLSD 125C/WM2 <sup>2)</sup>
Complete unit 250	TLSD 250/WA2	TLSD 250/EM2	TLSD 250/HB2	TLSD 250/HP2	TLSD 250/FP2	TLSD 250C/WM2 <sup>2)</sup>
Refill set 125	LGWA 2/SD125	LGEM 2/SD125	LGHB 2/SD125	LGHP 2/SD125	LGFP 2/SD125	LGWM 2/SD125C <sup>2)</sup>
Refill set 250	LGWA 2/SD250	LGEM 2/SD250	LGHB 2/SD250	LGHP 2/SD250	LGFP 2/SD250	LGWM 2/SD250C <sup>2)</sup>

Chain oils	LHMT 68	LHHT 265	LHFP 150
Description	Medium temperature oil	High temperature oil	Food compatible, NSF H1 approved oil
Complete unit 125	TLSD 125/HMT68	–	TLSD 125/HFP15
Complete unit 250	TLSD 250/HMT68	–	TLSD 250/HFP15
Refill set 125	LHMT 68/SD125	LHHT 265/SD125	LHFP 150/SD125
Refill set 250	LHMT 68/SD250	LHHT 265/SD250	LHFP 150/SD250

## Technical data

Designation	TLSD 125 and TLSD 250	
Grease capacity		
– TLSD 125	125 ml (4.2 US fl. oz)	
– TLSD 250	250 ml (8.5 US fl. oz)	
Emptying time	User adjustable: 1, 2, 3, 4, 6, 8, 9, 10 and 12 months	
Lowest grease purge		
– TLSD 125	0,3 ml (0.01 US fl. oz) per day	
– TLSD 250	0,7 ml (0.02 US fl. oz) per day	
Highest grease purge		
– TLSD 125	4,1 ml (0.13 US fl. oz) per day	
– TLSD 250	8,3 ml (0.28 US fl. oz) per day	
Ambient temperature range		
– TLSD 1-BAT	0 to 50 °C (30 to 120 °F)	
– TLSD 1-BATC	–10 to +50 °C (15 to 120 °F)	
Maximum operating pressure	5 bar (75 psi)	
Drive mechanism	Electro mechanical	
Connection thread	G <sup>1</sup> / <sub>4</sub>	
Maximum feed line length with:		
– grease	Up to 3 meters (10 ft) <sup>3)</sup>	
– oil	Up to 5 meters (16 ft)	
LED status indicators		
– Green led (each 30 sec)	OK	
– Yellow led (each 30 sec)	Pre warning, low battery power	
– Yellow led (each 5 sec)	Pre warning, high back pressure	
– Red led (each 5 sec)	Warning, stopped on error	
– Red led (each 2 sec)	Warning, empty cartridge	
Protection class assembled lubricator	IP 65	
Battery pack		
– TLSD 1-BAT	4,5 V 2,7 Ah/Alkaline manganese	
– TLSD 1-BATC	4,5 V 2,9 Ah/Lithium-Iron Disulfide	
Recommended storage temperature	20 °C (70 °F)	
Storage life of lubricator	3 years <sup>4)</sup> (2 years for LGFP 2 and Oils)	
Total weight (incl. packaging)		
– TLSD 125	635 g (22.5 oz)	
– TLSD 250	800 g (28.2 oz)	

1) TLSD lubricator and SD refill sets are not for offer/sale/use in Germany, France or United States.

2) Special version for low temperatures.

3) The maximum feed line length is dependent on ambient temperature, grease type and back pressure created by the application.

4) Maximum storage life is 3 years from production date, which is printed on the side of the canister. The canister and battery pack may be used at 12 month setting even if activated 3 years from production date.

## Electro-mechanical single point automatic lubricators

### SKF TLMR series

The SKF Automatic Lubricant Dispenser – TLMR – is a single point automatic lubricator designed to supply grease to a single lubrication point. With a relatively high pressure of 30 bars, this lubricator can operate at long distances providing optimum results with difficult-to-reach and unsafe lubrication locations. With a wide temperature range and robust design, the TLMR lubricator is suitable for operating conditions with various levels of temperature and vibration.

- Filled with high quality SKF greases
- Temperature independent dispense rate
- Maximum discharge pressure of 30 bar over the whole dispensing period
- Available in two versions: TLMR 101 powered by batteries (standard Lithium AA type) and TLMR 201 powered by 12–24 V DC
- Available with non-refillable cartridges in two sizes: 120 and 380 ml

#### Typical applications

- Applications requiring high lubricant consumption
- Applications experiencing high vibration in operation
- Excellent water and dust protection makes TLMR suitable for general machinery applications and food processing machinery
- Excellent high temperature performance makes TLMR suitable for engine rooms and hot fan applications
- Excellent low temperature performance makes TLMR suitable for wind turbine applications

SKF DialSet helps to calculate the correct dispense rate.



A special bracket makes TLMR easy to mount onto a surface



The cartridges are easily replaceable



## Ordering details

Grease	Description	TLMR 101 refill sets (cartridge and battery)		TLMR 201 cartridges	
		120 ml	380 ml	120 ml	380 ml
LGWA 2	High load, extreme pressure, wide temperature range bearing grease	LGWA 2/MR120B	LGWA 2/MR380B	LGWA 2/MR120	LGWA 2/MR380
LGEV 2	Extremely high viscosity bearing grease with solid lubricants	–	LGEV 2/MR380B	–	LGEV 2/MR380
LGHB 2	High load, high temperature, high viscosity bearing grease	–	LGHB 2/MR380B	–	LGHB 2/MR380
LGHP 2	High performance, high temperature bearing grease	–	LGHP 2/MR380B	–	LGHP 2/MR380
LGFP 2	Food compatible bearing grease NSF H1 certified	LGFP 2/MR120B	LGFP 2/MR380B	LGFP 2/MR120	LGFP 2/MR380
LGWM 1	Extreme pressure, low temperature	–	LGWM 1/MR380B	–	LGWM 1/MR380
LGWM 2	High load, wide temperature range bearing grease	–	LGWM 2/MR380B	–	LGWM 2/MR380
LGEP 2	Extreme pressure bearing grease	–	LGEP 2/MR380B	–	LGEP 2/MR380
LGMT 3	All purpose industrial and automotive grease	–	LGMT 3/MR380B	–	LGMT 3/MR380

Complete set		Designation	TLMR pump		Designation
TLMR 101	380 ml	TLMR 101/38WA2	Lubricator powered by batteries		TLMR 101
TLMR 201	380 ml	TLMR 201/38WA2	Lubricator powered by 12–24 V DC		TLMR 201

## Technical data

Designation	TLMR 101 and TLMR 201		Drive mechanism	Electro mechanical
Grease capacity	120 ml (4.1 US fl. oz)	380 ml (12.8 US fl. oz)	Connection thread	G $\frac{1}{4}$ female
Emptying time	User adjustable: 1,2,3,6,9,12, 18, 24 months or purge		Maximum feed line length*	Up to 5 meters (16 ft)
Lowest setting			LED status indicators	
– 120 ml cartridge	0,16 ml (0.005 US fl. oz) per day		– Green LED (every 8 sec)	OK
– 380 ml cartridge	0,5 ml (0.016 US fl. oz) per day		– Green and red LED (every 8 sec)	Almost empty
Highest setting			– Red LED (every 8 sec)	Error
– 120 ml cartridge	3,9 ml (0.13 US fl. oz) per day		Protection class	
– 380 ml cartridge	12,5 ml (0.42 US fl. oz) per day		– DIN EN 60529	IP 67
Purge	31 ml (1 US fl. oz) per hour		– DIN 40 050 Teil 9	IP 6k9k
Ambient temperature range	–25 to +70 °C (–13 to +158 °F)		Power	
Maximum operating pressure	30 bar (435 psi)		– TLMR 101	4 AA Lithium batteries
			– TLMR 201	12–24 Volt DC

\* The maximum feed line length is dependent on ambient temperature, grease type and back pressure created by the application.



























# Accessories


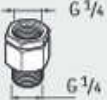


A full range for enhanced versatility of SKF automatic lubricators

## Accessories for single point automatic lubricators

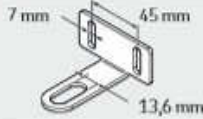

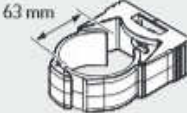








### Connectors

	LAPA 45 ● ● ○	Angle connection 45°		LAPN 1/8 ● ● ○	Nipple G <sup>1/4</sup> – G <sup>1/8</sup>
	LAPA 90 ● ● ○	Angle connection 90°		LAPN 1/4 ● ● ○	Nipple G <sup>1/4</sup> – G <sup>1/4</sup>
	LAPE 35 ● ● ○	Extension 35 mm		LAPN 1/2 ● ● ○	Nipple G <sup>1/4</sup> – G <sup>1/2</sup>
	LAPE 50 ● ● ○	Extension 50 mm		LAPN 1/4 UNF ● ● ○	Nipple G <sup>1/4</sup> – 1/4 UNF
	LAPF F <sup>1/4</sup> ● ●	Tube connection female G <sup>1/4</sup>		LAPN 3/8 ● ● ○	Nipple G <sup>1/4</sup> – G <sup>3/8</sup>
	LAPF M <sup>1/8</sup> S ○	Tube connection male G <sup>1/8</sup> for 6 × 4 tube		LAPN 6 ● ● ○	Nipple G <sup>1/4</sup> – M6
	LAPF M <sup>1/4</sup> S ○	Tube connection male G <sup>1/4</sup> for 6 × 4 tube		LAPN 8 ● ● ○	Nipple G <sup>1/4</sup> – M8
	LAPF M <sup>1/8</sup> ● ●	Tube connection male G <sup>1/8</sup>		LAPN 8x1 ● ● ○	Nipple G <sup>1/4</sup> – M8 × 1
	LAPF M <sup>1/4</sup> ● ●	Tube connection male G <sup>1/4</sup>		LAPN 10 ● ● ○	Nipple G <sup>1/4</sup> – M10
	LAPF M <sup>3/8</sup> ● ●	Tube connection male G <sup>3/8</sup>		LAPN 10x1 ● ● ○	Nipple G <sup>1/4</sup> – M10 × 1
	LAPG 1/4 ● ● ○	Grease nipple G <sup>1/4</sup>		LAPN 12 ● ● ○	Nipple G <sup>1/4</sup> – M12
	LAPM 2 ● ● ○	Y-connection		LAPN 12x1.5 ● ● ○	Nipple G <sup>1/4</sup> – M12 × 1,5

## Non return valves (for oil applications)






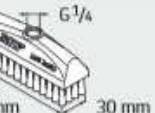

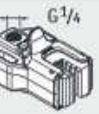
		LAPV 1/4	Non-return valve G 1/4
● ● ○			
		LAPV 1/8	Non-return valve G 1/8
● ● ○			

## Mounting and protecting devices & extras

	LAPC13	Bracket
●		
	LAPC50	Clamp
●		
	LAPC63	Clamp
●		
	LAPP4	Protection base
●		
	LAPP6	Protection cap
●		
	LAPT1000	Flexible tube, 1 000 mm long, 8 × 6 mm
● ●		
	LAPT5000	Flexible tube, 5 000 mm long, 8 × 6 mm
● ●		
	LAPT1000S	Flexible tube, 1 000 mm long, 6 × 4 mm
○		
	LAPT5000S	Flexible tube, 5 000 mm long, 6 × 4 mm
○		
	TLSD1-BAT	Battery pack
●		
	TLSD1-BATC	Lithium battery pack
●		

- SKF LAGD Series
- SKF TLSD Series
- SKF TLMR Series

## Brushes (for oil applications)

		LAPB 3x4E1	Brush 30 × 40 mm
● ● ○			
		LAPB 3x7E1	Brush 30 × 60 mm
● ● ○			
		LAPB 3x10E1	Brush 30 × 100 mm
● ● ○			
		LAPB 5-16E1	Elevator brush, 5–16 mm gap
● ●			



# SKF MultiPoint Automatic Lubricator

Ready-to-use centralised lubrication systems

## SKF LAGD 400 and LAGD 1000

SKF MultiPoint Lubricators are designed to simultaneously feed several points. They are often the most user-friendly and cost-effective option when longer distances, high flow, or enhanced monitoring features are required. These ready-to-use centralised lubrication systems can be installed without any additional assistance and require no special training to be configured.



- Easy to install and use
- Transparent reservoir allows visual inspection
- Refillable through grease fitting
- Alarm function for blocked feed lines (except on LAGD 1000/B - battery version), and empty reservoir
- Machine steering (i.e. lubricator only operates while machine is running)
- Electronic setting and read-out of control parameters

### Typical applications

- Series of lubrication points with similar requirements
- Components requiring large amounts of grease
- Critical applications requiring continuous monitoring or machine steering

SKF DialSet helps to calculate the correct dispense rate.



### Technical data



Designation	LAGD 400	LAGD 1000/DC	LAGD 1000/AC
Number of outlets	1 to 8	10 to 20	10 to 20
Max. length of pipes	5 m (16 ft.)	6 m (19.7 ft.)	6 m (19.7 ft.)
Flow rate	Up to 10 cm <sup>3</sup> /day (0.3 US fl. oz./day)	Up to 16 cm <sup>3</sup> /day (0.5 US fl. oz./day)	Up to 33 cm <sup>3</sup> /day (1.1 US fl. oz./day)
Reservoir capacity	0.4 litre (13.5 US fl. oz)	1 litre (33.8 US fl. oz)	1 litre (33.8 US fl. oz)
Tubing	6 × 1,5 mm (1/4 × 0.06 in.) 20 m (65 ft.) and fittings included	6 × 1,25 mm (0.05 in.) 50 m (164 ft.) and fittings included	6 × 1,25 mm (0.05 in.) 50 m (164 ft.) and fittings included
Greases	NLGI 1, 2 and 3	Up to NLGI grade 2 Flow pressure < 700 mbar	Up to NLGI grade 2 Flow pressure < 700 mbar
Permissible operating temperature	0 to 50 °C (30 to 120 °F)	-25 to +75 °C (-15 to +165 °F)	-25 to +60 °C (-15 to +140 °F)
Max. operating pressure	40 bar (600 psi)	150 bar (2 175 psi)	150 bar (2 175 psi)
IP Rating	IP54	IP65	IP65
Rated voltage	110–240 VAC, 50–60 Hz or 24 V DC	24 V DC	110–240 V 50/60 Hz
Connection thread	G <sup>1</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>8</sub>
Alarms	Blocked feed lines, empty cartridge	Blocked feed lines, empty cartridge	Blocked feed lines, empty cartridge



# Oil inspection & dispensing



Automatic adjustment for optimal lubricating oil level

## SKF Oil Levellers LAHD series

SKF LAHD 500 and LAHD 1000 oil levellers are designed to automatically compensate oil evaporation and leakages under running conditions. This helps in maintaining the correct oil level within a bearing housing, gear box, crankcase, or similar oil bath application. The SKF LAHD series optimises machine performance and increases their service life. Furthermore, they enhance the possibility of an accurate visual inspection of the oil level.

- Optimally maintained oil level
- Extended inspection interval
- Easy visual inspection
- Compensation for evaporation losses

### Typical applications

- Oil lubricated bearing housings
- Gear boxes
- Crankcases



### Technical data

Designation	LAHD 500 / LAHD 1000
Reservoir volume	
– LAHD 500	500 ml (17 US fl. oz)
– LAHD 1000	1 000 ml (34 US fl. oz)
Boundary dimensions	
– LAHD 500	Ø91 mm × 290 mm high (3.6 × 11.4 in.)
– LAHD 1000	Ø122 mm × 290 mm high (4.8 × 11.4 in.)
Allowed temperature range	–20 to +70 °C (–5 to +158 °F)
Length of connecting tube	600 mm (23.5 in.)
Connection thread	G <sup>1</sup> / <sub>2</sub>
Suitable oil types	Mineral and synthetic oils





A proper solution for oil handling

## Oil handling containers LAOS series

LAOS series is comprised of an extensive assortment of drums and dispensing lids ideal for the storage and administration of fluids and oil lubricants. The lids are available in ten different colours to fit colour coded identification systems.

- Enables easier, safer and cleaner lubrication
- Allows for accurate oil consumption control
- Improves health and safety due to oil spillage minimisation
- Heat and chemically resistant
- Drum and lid threads provide tight, quick and easy assembly
- Quick closing spouts
- Vacuum valve for enhanced spilling control



### Mini spout

Ideal where the reservoirs to be filled have small filling holes. Outlet diameter is approx. 7 mm (0.28 in.)



### Stretch spout

Ideal for precise pouring tasks and difficult to access points. The 12 mm (0.48 in.) outlet is ideal for viscosities up to ISO VG 220.



### Stumpy spout

Due to the wide opening of 25 mm (1 in.), ideal for high viscosities and/or when a high flow is required.



### Utility lid

Two main uses: Quick pouring if necessary and assembly of pump onto a 3, 5 or 10 L drum (0.8, 1.3 or 2.6 US Gal).



### Storage lid

Useful for storage or transportation of oils.



### Contents label

For proper marking of drum contents

### LAOS series lids

Colour	Mini spout	Stretch spout	Stumpy spout	Utility lid	Storage lid	Contents label
Tan	LAOS 09057	LAOS 09682	LAOS 09705	LAOS 09668	LAOS 09644	LAOS 06919
Grey	LAOS 09064	LAOS 09699	LAOS 09712	LAOS 09675	LAOS 09651	LAOS 06964
Orange	LAOS 09088	LAOS 09798	LAOS 09729	LAOS 09866	LAOS 09934	LAOS 06940
Black	LAOS 09095	LAOS 09804	LAOS 09736	LAOS 09873	LAOS 09941	LAOS 06995
Dark green	LAOS 09101	LAOS 09811	LAOS 09743	LAOS 09880	LAOS 09958	LAOS 06971
Green	LAOS 09118	LAOS 09828	LAOS 09750	LAOS 09897	LAOS 09965	LAOS 06957
Blue	LAOS 09125	LAOS 09835	LAOS 09767	LAOS 09903	LAOS 09972	LAOS 06988
Red	LAOS 09132	LAOS 09842	LAOS 09774	LAOS 09910	LAOS 09989	LAOS 06926
Purple	LAOS 09071	LAOS 09392	LAOS 09388	LAOS 09408	LAOS 09415	LAOS 06933
Yellow	LAOS 09194	LAOS 62437	LAOS 64936	LAOS 62451	LAOS 62475	LAOS 06902





### Drums

Designed with wide necks and a standard thread size. Fits any LAOS lid. Available in 5 different sizes.

### Pumps

Standard pump suitable for viscosities up to ISO VG 460. High flow (approx. 14 strokes per litre/US quart). High viscosity pump for viscosities up to ISO VG 680. High efficiency with approx. 12 strokes per litre/US quart. As a protection against airborne contaminants during the pumping process, a 10 micron breather is available. For both pumps an anti-drip long discharge hose of 1.5m (4.9 ft) and reducer nozzles are available.

### Hose extensions

Designed to extend the reach of the lids. Two different versions available for stumpy and stretch lids. The stretch version's length can be adjusted by removing the fitting and cutting it down to the desired size.

## LAOS series drums, pumps and spouts

Drums		Pumps		Hose extensions	
LAOS 09224	1,5 litre drum (0.4 US gal)	LAOS 62568	High viscosity pump (to fit LAOS utility lids)	LAOS 67265	Stumpy spout hose extension
LAOS 63571	2 litre drum (0.5 US gal)	LAOS 09423	Breather for high viscosity pump	LAOS 62499	Stretch spout hose extension
LAOS 63595	3 litre drum (0.8 US gal)	LAOS 62567	Standard Pump (to fit LAOS utility lids)		
LAOS 63618	5 litre drum (1.3 US gal)	LAOS 09422	Pump reducer nozzle		
LAOS 66251	10 litre drum (2.6 US gal)				





# Lubrication analysis tools



Portable grease analysis kit for field use

## SKF Grease Test Kit TKG1

Lubricant analysis is a vital part of a predictive maintenance strategy. Until recently, however, oils were almost always analysed despite the fact that around 80% of bearings are lubricated with grease. Tribology expertise and years of research have allowed SKF to develop a complete methodology to assess grease condition.

- Extremely useful in field decision-making processes
- Allows adjustment of grease relubrication intervals according to real conditions
- Grease can be evaluated to detect possible unacceptable deviations from batch to batch
- Allows verification of the suitability of certain greases in specific applications
- Helps in the prevention of damage due to underperforming lubricant greases
- Provides more information on root cause analysis
- Requires no special training to perform the tests
- Requires no harmful chemicals
- Small sample sizes required. Only 0,5 g of grease is needed to perform all the tests

### Consistency test (Patent applied for)



### Oil bleeding characteristics



### Contamination evaluation





## Quick detection of oil condition changes

# SKF Oil Check Monitor TMEH 1

The SKF TMEH 1 measures the changes in dielectric constant of an oil sample. By comparing measurements obtained from used and fresh samples of the same oil, the degree of change in the condition of the oil is established.

Dielectric change is directly related to the oil's degradation and contamination level. The monitor allows tracking of mechanical wear and of any loss of the oil's lubricating properties.

- Hand-held and user friendly
- Numerical readout to facilitate trending
- Can store calibration (good oil) in its memory
- Shows changes in oil condition affected by such things as:
  - Water content
  - Fuel contamination
  - Metallic content
  - Oxidation



### Note

The SKF Oil Check Monitor is not an analytical instrument. It is an instrument to only detect changes in the oil condition. The visual and numerical read-outs are merely a guide to enable trending of the comparative readings of a good oil to a used oil of the same type and brand. Do not rely solely on numerical readings.

### Technical data

<b>Designation</b>	<b>TMEH 1</b>
<b>Suitable oil types</b>	mineral and synthetic oils
<b>Repeatability</b>	±5%
<b>Readout</b>	green/red grading + numerical value (–999 to +999)
<b>Battery</b>	9 V Alkaline type IEC 6LR61
<b>Battery lifetime</b>	>150 hours or 3 000 tests
<b>Product dimensions</b>	250 × 32 × 95 mm (9.8 × 1.3 × 3.7 in.)
<b>Carrying case dimensions</b>	530 × 85 × 180 mm (20.9 × 3.4 × 7.0 in.)

### Technical data

Designation	TKGT 1		
Parts	Components	Quantity	Specifications
Sampling tools	Sampling syringe	1	Polypropylene
	Sampling tube	1	PTFE, length approx. 1 m
	Permanent marker	1	Black
	Sampling containers	10	35 ml polyethylene
	Gloves	10 pairs	Grease resistant nitrile (synthetic rubber), powder free, size XL, colour blue
	Disposable spatulas	1	Set of 25
	250 mm stainless steel spatula	1	Stainless steel
	150 mm stainless steel spatula	1	Stainless steel
	Scissors	1	Stainless steel
Consistency test	Housing	1	Aluminium
	Weight	1	Stainless steel
	Mask	1	Plexiglas
	Glass plates	4	
Oil bleeding test	USB heater	1	2,5 W–5 V
	USB/220/110 V adaptor	1	Universal (EU, US, UK, Australia) to USB
	Paper pack	1	Contains 50 sheets
	Ruler	1	Aluminium graduated 0,5 mm
Contamination test	Pocket microscope	1	60–100x with light
	Batteries	2	AAA
Carrying case	CD	1	Contains instructions for use, report template, and consistency test scale
	Carrying case	1	Dimensions: 463 × 373 × 108 mm (18.2 × 14.7 × 4.25 in.)