Automatic lubricator SKF SYSTEM 24 LAGD series

Automatic lubricator SKF SYSTEM 24 (LAGD 60 and LAGD 125)

Application

The SKF SYSTEM 24 LAGD is a gas driven single-point automatic lubricator, which can be used to supply lubricant (grease or oil) to single lubrication points.
SKF SYSTEM 24 lubricators can be set to deliver a specific quantity of lubricant over a set time period. This allows a more accurate control of the amount of lubricant supplied compared to traditional manual re-lubrication techniques. The SKF SYSTEM 24 LAGD is ideal for applications which are difficult to reach with a grease gun, or where a large number of greasing points mean that manual greasing techniques would be less effective.

Typical applications include, amongst others:

- Pumps
- Fans & Blowers
- Conveyors
- Elevators (guides) and escalators (chains)
- Cranes
- Food Processing machinery
- Petrochemical industry
- Chains

Description

The SKF SYSTEM 24 LAGD consists of a transparent container filled with a specified lubricant and a cartridge containing an electrochemical gas cell that produces inert gas. Once activated, the internal batteries are electrically connected and gas production begins. The gas production rate is proportional to the electrical current, and can be adjusted by selecting the appropriate dispense period on the time dial on top of the lubricator. The dispense period can be between 1 and 12 months. In the event that a machine, to which the unit is fitted, is at a prolonged standstill, then the unit can be temporarily deactivated.

Once activated, the gas pressure builds up, until the piston moves and then the lubricator will start to dispense lubricant. There is an initial delay in gas build up before lubricant is dispensed. This delay is relative to the selected emptying time, for instance a 12-months setting has a longer delay than a 3-months setting.

The dispensing rates can vary due to changes in the operating ambient temperature. This is due to the contraction or expansion of the gas in relation to the ambient temperature and the subsequent influence of back pressure on the dispense rate. Above 40 °C (105 °F) or so, the unit runs twice as fast (e.g. 12-months setting will only last 6 months) and at around -10 ° C (15 °F) the unit runs half as fast (e.g. 6-months setting will last 12 months).

For optimum performance, SKF SYSTEM 24 LAGD units filled with LGHP 2 should not be exposed to ambient temperatures over 40 °C or have a time setting longer than 6 months.

The standard product (LAGD 125) contains 125 ml (4.2 fl. oz US) of lubricant. For applications with a lower lubricant demand or with space restrictions for installation, a 60 ml (2 fl. oz US) unit (LAGD 60) is available. Empty LAGD units are also available (LAGD 60/U and LAGD 125/U). They are meant to be filled by the user with their own choice of oil only. The oil can be filled through the outlet, for example, by means of a plastic squeeze bottle. SKF does not recommend these units to be filled with grease, for not all greases are suitable for automatic lubricators and can present oil separation issues. Oil filled and empty units are supplied with a plastic non-return valve, which stops the oil from flowing out of units that have not been activated.

For applications where there is insufficient space to install SKF SYSTEM 24 or where there are excessive vibrations, the unit can be remotely mounted. In this instance, a female tube connection (LAPF F1/4), tubing (LAPT 1000) and a male connector to the application (LAPF M1/4) are required. For oil filled lubricators, a non-return valve (LAPV 1/4 or LAPV 1/8) at the application end of the tubing is also required.

Intrinsically safe

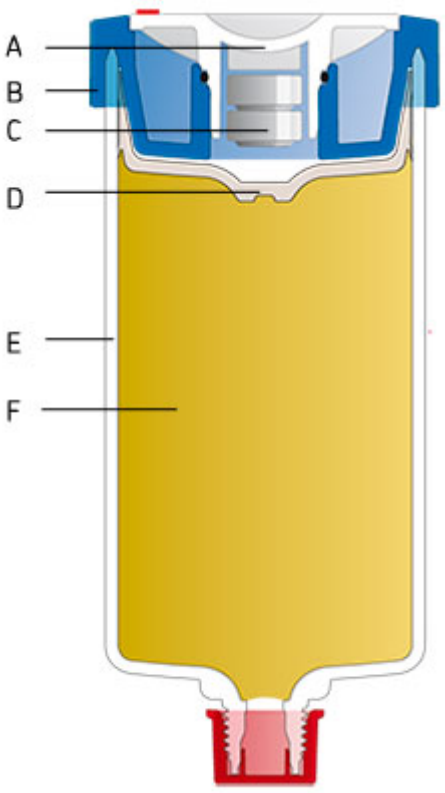
For hazardous environments, such as petrochemical installations, SKF SYSTEM 24 is considered intrinsically safe. KEMA has certified the SKF SYSTEM 24 LAGD 125 and LAGD 60 to a rating of:

In practice this implies that the lubrication point and piping (if any) must be already pre lubricated so a grease buffer is ensured. The values on the time set dial are an indication of the real emptying time based on an operating ambient temperature of 20 °C (68 °F) and a back pressure of 0,5 bars (7.25 psi).

II 1G Ex ia IIC T6 Ga
II 1D Ex ia IIIC T85°C Da
I M1 Ex ia I Ma

Accessories

A full range of accessories for SKF SYSTEM 24 lubricators is also available



To easily determine the correct setting for your application, SKF provides the easy to use SKF DialSet program. The grease-dispense rate calculations in this program are based on the latest SKF lubrication theories published in the SKF general catalogue, operating conditions and the LAGD grease-dispensing rate. The program is available in many languages as a stand-alone version for PC, in English for smartphones (Apple and Android), as well as online on www.mapro.skf.com/dialset, and contains calculation for both the 125 ml and 60 ml versions of LAGD.

SKF DialSet program

A. Tool-free activation and time setting slot

Allows easy installation and accurate adjustment of lubrication flow

B. Easy-grip top-cover

Facilitates easy and quick fitting

C. Gas cell

Produces gas

D. Special piston shape

Ensures optimum emptying of lubricator

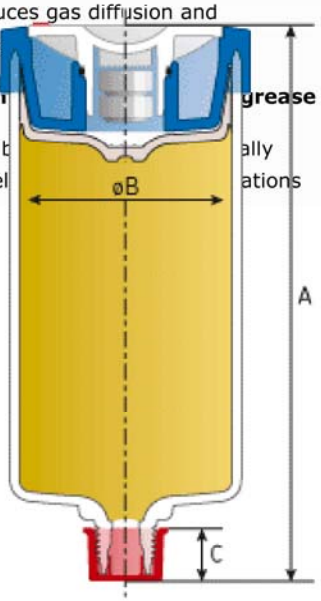
E. Transparent container made of polyamide

Reduces gas diffusion and incre

F. High grease

SKF b ally
devel ations

Technical data LAGD 125		
Grease capacity		125 ml, (4.2 fl. oz US)
Nominal emptying time		Adjustable; 1 - 12 months
Lowest grease flow		9 g (0.32 oz) per month
Ambient temperature range		-20 to 60 ° C (-5 to 140 ° F)*
Maximum operating pressure		5 bar (75 psi)**
Drive mechanism		Gas cell which produces gas
Body material		Polyamide
Connection thread		R 1/4
Maximum feed line length with:	**grease**	300 mm (11.8 in)
	oil	1500 mm (59 in)
Intrinsically safe approval		II 1G Ex ia IIC T6 Ga II 1D Ex ia IIIC T85°C Da I M1 Ex ia I Ma
Protection class		IP 68
Recommended storage temperature		20 ° C (70 ° F)
Storage life of lubricator		2 years ***
Weight approx.		185 g (6.5 oz) (grease included)
Designation		LAGD 125/"lubricant" E.g.: LAGD 125/WA2 (125 ml lubricator filled with LGWA 2)

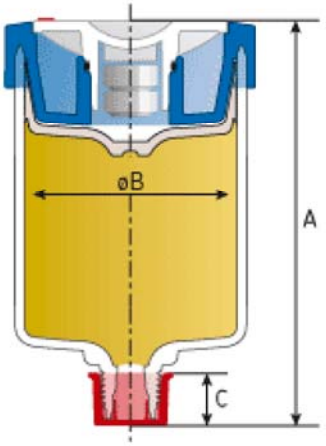


	mm	in
A	118	4.646
B	50	1.969
C	11	0.433

*	If the ambient temperature is constant between 40 and 60 ° C (104 and 140 ° F), do not select dispense rate of more than 6 months for optimum performance.
**	Maximum internal pressure would be achieved with a full lubricator applied to a completely blocked application.
***	Storage life is 2 years from production date, which is printed on the side of the lubricator. The lubricator may be used even at the 12 months setting if activated 2 years from production date

Technical data LAGD 60

Grease capacity		60 ml, (2.03 fl. oz US)
Nominal emptying time		Adjustable; 1 - 12 months
Lowest grease flow		4,5 grams per month
Ambient temperature range		-20 to 60 °C (-5 to 140 °F)
Maximum operating pressure		5 bar (75 psi)*
Drive mechanism		Gas cell which produces gas
Body material		Polyamide
Connection thread		R 1/4
Maximum feed line length with:	**grease**	300 mm (11.8 in)
	oil	1500 mm (59 in)
Intrinsically safe approval		II 1G Ex ia IIC T6 Ga II 1D Ex ia IIIC T85°C Da I M1 Ex ia I Ma
Protection class		IP 68
Recommended storage temperature		20 °C (70 °F)
Storage life of lubricator		2 years **
Weight Approx.		115 g (4.21 oz) (grease included)
Designation		LAGD 60/"lubricant" E.g.: LAGD 60/WA2 (60 ml lubricator filled with LGWA 2)



	mm	in
A	86	3.386
B	50	1.969
C	11	0.433

*	Maximum internal pressure would be achieved with a full lubricator applied to a completely blocked application.
**	Storage life is 2 years from production date, which is printed on the side of the lubricator. The lubricator may be used even at the 12 months setting if activated 2 years from production date.

Empty lubricators

The SKF SYSTEM 24 lubricator can also be ordered without lubricant. The designation for the empty SKF SYSTEM 24 lubricators are LAGD 60/U and LAGD 125/U.

This products are only suitable for filling with oils. The oil can be filled through the outlet, for example, by means of a plastic squeeze bottle.

Accessories

A full range of accessories is available.

SKF SYSTEM 24 approved and available lubricants

SKF Greases

Complete designation	Grease	Description
LAGD 125/WA2	LGWA 2	Multi-purpose EP type grease
LAGD 125/EM2	LGEM 2	High loads, slow rotations
LAGD 125/HB2	LGHB 2	High temperature, loads, plain bearing
LAGD 125/FP2	LGFP 2	Food processing industry
LAGD 125/HP2	LGHP 2	High performance polyurea
LAGD 125/GB2	LGGB 2	Biodegradable low toxicity
LAGD 125/WM 2	LGWM 2	High load, wide temperature
LAGD 60/WA2	LGWA 2	Multi-purpose EP type grease
LAGD 60/EM2	LGEM 2	High loads, slow rotations
LAGD 60/HB2	LGHB 2	High temperature, loads, plain bearing
LAGD 60/FP2	LGFP 2	Food processing industry

LAGD 60/HP2	LGHP 2	High performance polyurea

SKF Oils

Complete designation	Oil	Description
LAGD 125/HMT68	LHMT68	EP type chain oil
LAGD 60/HMT68	LHMT68	EP type chain oil
LAGD 125/HHT26	LHHT265	High temperature chain oil
LAGD 125/HFP15	LHFP150	Food grade oil, general purpose
LAGD 125/FFM80	LFFM80	Food grade oil, high moisture environments
LAGD 125/FFT22	LFFT220	Food grade oil, high temperature environments
LAGD 125/U	Empty	Suitable for oil filling only
LAGD 60/U	Empty	Suitable for oil filling only

Specials

Complete designation	Lubricant	Description
LAGD 125/LG102	Kluberquiet BQ 72-72	
LAGD 125/LG201	Optipit	Windmill slewing ring
LAGD 125/LG302	Moblitemp SHC 100	Synthetic organo-clay, non-soap thickened antiwear greases for high temperature applications
LAGD 125/LG337	Kalith EP2	
LAGD 125/LG703	Shell Albida HD2	

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