SKF SYSTEM 24

LAGD 60 / LAGD 125

Instructions for use
Mode d'emploi
Bedienungsanleitung
Instrucciones de uso-
Manuale d'istruzioni

Bruksanvisning
Gebruiksaanwijzing
Instruções de uso
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Original instructions

EU Declaration of conformity

We, SKF Maintenance Products, Kelvinbaan 16,
3439 MT Nieuwegein, The Netherlands declare that the

SKF System 24
LAGD 60 and LAGD 125

have been designed and manufactured in accordance with:
DIRECTIVE 2014/34/EU OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of 26 February 2014 on the approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres as outlined in Harmonised Standards

EN 60079-0: 2012
EN 60079-11: 2012
EN 50303: 2000

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

EC-Type Approval:
KEMA 07ATEX0132 X

CE 0537

IECEx Certificate of Conformity:
IECEx DEK 15.0066X

Where in X denotes: –20°C ≤ Ta ≤ + 60°C (LAGD 60/... and LAGD 125/...)
appropiate measures must be taken to prevent electric discharge

EUROPEAN ROHS DIRECTIVE 2011/65/EU

Nieuwegein, The Netherlands, April 4, 2016

Sébastien David
Manager Product Development and Quality

Safety recommendations

To prevent electrostatic discharge in hazardous areas,
only wet cleaning is permitted.

1. Technical data

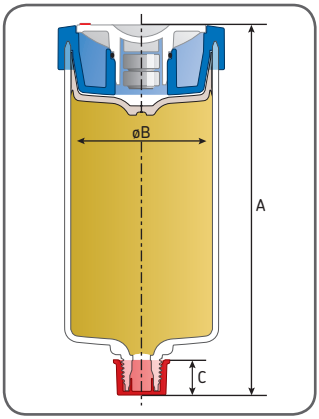
Grease capacity LAGD 60	60 ml, (2,03 fl.oz US)
Grease capacity LAGD 125	125 ml, (4,25 fl.oz US)
Nominal emptying time	adjustable; 1-12 months
Ambient temperature range LAGD 60/125	-20 °C to 60 °C (-5 °F to 140 °F)
Intrinsically Safe approval	II 1G Ex ia IIC T6 Ga II 1D Ex ia IIIC T85°C Da I M1 Ex ia I Ma
Protection Class	IP 68
Maximum operating pressure	5 bar (75 psi)*
Drive source	pressurised inert gas
Connection thread	R 1/4
Recommended storage temperature	+20 °C (+70 °F)
Storage life of lubricator	2 years **
Weight LAGD 60	approx. 130 g (4,3 oz) (grease included)
Weight LAGD 125	approx. 185 g (6,9 oz) (grease included)
Designation	LAGD 125/WA2 (filled with LGWA 2) LAGD “Capacity”/”lubricant”

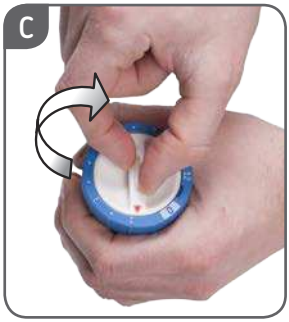
* The maximum internal pressure of a full lubricator applied to a fully blocked application.

** Storage life lasts for 2 years from the production date printed on the side of the lubricator. The lubricator may be used for the maximum 12 months after 2 years of storage.

Empty S24 units are for oil only and must be used with a non-return valve.

	LAGD 125		LAGD 60	
	mm	inch	mm	inch
A	118	4.645	86	3.386
øB	50	1.968	50	1.968
C	11	0.433	11	0.433





2. Installation

1. Write the installation date on the unit with a water-resistant pen. (Fig A)
2. Remove the end cap of the lubricator. (Fig B)
3. Turn the dial to activate the lubricator. (Fig C)
4. Clean the area around the lubrication point.
5. Remove the previous unit or old grease fitting.
6. Attach the new unit hand tight. (Fig D)
7. We recommend to check the general condition of the bearing and the position of the lubricator piston every normal manual lubrication interval.

When the unit is installed on a new application:

1. Make sure that the grease in the SYSTEM 24 is suitable.
2. Fill the supply lines and the bearing with grease.
3. Make sure the grease is compatible.
4. Make sure the ambient temperature is within the acceptable limits. If the ambient temperature is constantly above +40 °C do not select a dispense rate of more than 6 months for optimum performance.
5. Make sure the unit supplies grease to the bearing, or component to be lubricated.
6. Make sure that there is no connection for a grease gun on the same lubrication point.
7. Install the unit no more than 300 mm (grease) or 1 500 mm (oil) from the bearing.
8. Use only supply lines with an internal diameter of 6 mm.
9. Protect the unit against impact or vibration. Use the protection base LAPP 4 to shield the unit, or install the unit remotely.
10. Protect the unit against heat and sudden temperature changes.

Note:

- The lubricator can be temporarily de-activated. Set the lubricator time set dial to 0.
- The unit can be installed in any position. The unit is waterproof (IP 68) and can be installed under water.
- Oil filled lubricators have non-return valve plugs as standard. Do not remove it.
- Empty S24 units are for oil only and must be used with a non-return valve.

English

3. Selection of dispense rate

SKF recommends using one of the following methods to select the dispense rate.

3.1 Experience based approach

If the previous selection rate is satisfactory apply the same to the new lubricator.

3.2 Grease gun equivalence

Set the lubricator time to make sure the bearing receives the same amount of lubricant as previously supplied by a grease gun.
Example:

- Bearing "X" receives 10 strokes from SKF hand operated grease gun (SKF 1077600) per month.
- One full stroke = 1,5 cm^3.

LAGD 60

- The content of the lubricator LAGD 60 is 60 ml = 60 cm^3.
- Therefore 60 cm^3 divided by 1,5 cm^3 = 40 strokes.
- 10 strokes per month equals 40 divided by 10 = 4 months.

Set the lubricator time setting on 4 months.

LAGD 125

- The content of the lubricator LAGD 125 is 125 ml = 125 cm^3.
- Therefore 125 cm^3 divided by 1,5 cm^3 = 83 strokes.
- 10 strokes per month equals 83 divided by 10 = 8,3 months.

Set the lubricator time setting on 8 months.

3.3 SKF DialSet 4.0

DialSet is a re-lubrication calculation program, which easily determines the right time setting for SKF SYSTEM 24 and SYSTEM MultiPoint automatic lubricators applications. The DialSet program and documentation MP3501 can be found on www.mapro.skf.com.

3.4 SKF LubeSelect for SKF greases

SKF LubeSelect for SKF greases is a website that can be consulted through an internet connection, which easily determines the right lubricant and lubricator setting for bearings. The website is only available on www.skf.com after logging in at @ptitute exchange.

4. Activation period

The lubricator has a time delay before the unit starts to supply lubricant. The delay varies according to the time setting selected and the operating temperature.
In most cases the lubricant in the bearing housing contains sufficient lubrication during this activation period. The activation period can be reduced by running the lubricator for 1 day on 1 month time setting before changing it to the required time setting.

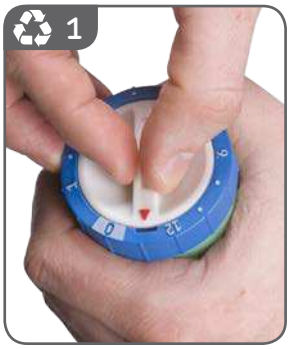
4.1 Influences on time setting

The dispense rate can be influenced by resistance in lubrication channels and the ambient temperature.
If the ambient temperature is below -10 °C (+14 °F) then the emptying time will be approximately twice that is shown on the lubricator. If the ambient temperature is above +40 °C (+104 °F) then for the LAGD 60/... and LAGD 125/... the emptying time is approximately half that shown on the lubricator.

5. Problem solving

Problem	Possible causes	Action
Lubricator does not dispense or dispenses too slowly	Incorrect adjustment	Adjust the dispense rate
	Lubricator is not activated	Activate the lubricator time set dial
	Lubrication channels are blocked	Clear the blockage by forcing grease with a grease gun through the lubrication channels
	The resistance is too high	Make sure that: - excessive grease can escape - supply lines are not longer than 300 mm - supply lines have a inner diameter of 6 mm - Lubrication point is suitable for gas driven lubricators
Lubricant dispenses too quickly	Incorrect adjustment	Adjust the dispense rate
	Short term temperature peak	No corrective action needed
Air between the piston and the lubricant	Installed longer period than the selected time	Replace the unit
	The ambient temperature is more than the acceptable limit	Replace the unit and protect the unit against high ambient temperatures
Lubricator neck breaks	Too high vibration or impact	Support the unit with the clamp LAPC 50 or protection plate LAPP 4
If the lubricator still fails to operate, contact your local SKF SYSTEM 24 supplier.		

Material safety data sheets for the LAGD 60/125 and for the lubricants used can be found at www.mapro.skf.com.



6. Disposal advice

Separate the lubricator in parts for disposal.

1. Turn the arrow on the dial to the screwdriver slot.
2. Insert a screw driver into the screwdriver slot
3. Lever the dial out of the lubricator.
4. The parts must be discarded in accordance with local regulations.

- Consider the lubricator reservoir as industrial waste (oil, greases, filters.....)
  EU waste code 150110
- Consider the dial, with battery, as battery waste.
  EU waste code 160604
- Consider the resistor plate as electronic waste.

7. Accessories

Designation	Description
LAPA 45	Angle connection 45°
LAPA 90	Angle connection 90°
LAPB 3X4E1	Lubrication brush 3 x 4 cm*
LAPB 3X7E1	Lubrication brush 3 x 6 cm*
LAPB 3X10E1	Lubrication brush 3 x 10 cm*
LAPB 5-16E1	Lift rail lubrication brush*
LAPC 50	Clamp
LAPE 35	Extension 35 mm
LAPE 50	Extension 50 mm
LAPF F1/4	Tube connection female G 1/4
LAPF M1/4	Tube connection male G 1/4
LAPF M1/8	Tube connection male G 1/8
LAPF M3/8	Tube connection male G 3/8
LAPG 1/4	Grease nipple G 1/4
LAPM 2	Y-connection
LAPM 4	4 in 1 manifold G 1/2
LAPN 1/8	Nipple G 1/4 - G 1/8
LAPN 1/2	Nipple G 1/4 - G 1/2
LAPN 1/4	Nipple G 1/4 - G 1/4
LAPN 1/4UNF	Nipple G 1/4 - G 1/4 28 UNF
LAPN 3/8	Nipple G 1/4 - G 3/8
LAPN 6	Nipple G 1/4 - M6
LAPN 8	Nipple G 1/4 - M8
LAPN 8X1	Nipple G 1/4 - M8x1
LAPN 10	Nipple G 1/4 - M10
LAPN 10X1	Nipple G 1/4 - M10x1
LAPN 12	Nipple G 1/4 - M12
LAPN 12X1.5	Nipple G 1/4 - M12x1,5
LAPP 4	Protection base
LAPT 1000	Flexible tube, 1 000 mm long
LAPV 1/4	Non return valve G 1/4
LAPV 1/8	Non return valve G 1/8

** Use only with oil filled SKF SYSTEM 24 units.*

7. Accessori

Codice	Descrizione
LAPA 45	Collegamento angolare a 45°
LAPA 90	Collegamento angolare a 90°
LAPB 3X4E1	Spazzola di lubrificazione 3 x 4 cm*
LAPB 3X7E1	Spazzola di lubrificazione 3 x 6 cm*
LAPB 3X10E1	Spazzola di lubrificazione 3 x 10 cm*
LAPB 5-16E1	Spazzola per la lubrificazione di guide elevatori *
LAPC 50	Morsetto
LAPE 35	Prolunga 35 mm
LAPE 50	Prolunga 50 mm
LAPF F1/4	Raccordo femmina per tubi G 1/4
LAPF M1/4	Raccordo maschio per tubi G 1/4
LAPF M1/8	Raccordo maschio per tubi G 1/8
LAPF M3/8	Raccordo maschio per tubi G 3/8
LAPG 1/4	Ingrassatore G 1/4
LAPM 2	Raccordo a Y
LAPM 4	Collettore 4 in 1 G 1/2
LAPN 1/8	Raccordo G 1/4 - G 1/8
LAPN 1/2	Raccordo G 1/4 - G 1/2
LAPN 1/4	Raccordo G 1/4 - G 1/4
LAPN 1/4UNF	Raccordo G 1/4 - G 1/4 28 UNF
LAPN 3/8	Raccordo G 1/4 - G 3/8
LAPN 6	Raccordo G 1/4 - M6
LAPN 8	Raccordo G 1/4 - M8
LAPN 8X1	Raccordo G 1/4 - M8x1
LAPN 10	Raccordo G 1/4 - M10
LAPN 10X1	Raccordo G 1/4 - M10x1
LAPN 12	Raccordo G 1/4 - M12
LAPN 12X1.5	Raccordo G 1/4 - M12x1,5
LAPP 4	Base di protezione
LAPT 1000	Tubo flessibile di lunghezza 1 000 mm
LAPV 1/4	Valvola di ritegno G 1/4
LAPV 1/8	Valvola di ritegno G 1/8

** Da utilizzare esclusivamente con unità SYSTEM 24 contenenti olio.*

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符合欧盟相关产品条例的声明

我们，SKF维护产品, Kelvinbaan 16,
3439 MT Nieuwegein 荷兰 在此声明，以下产品：

SKF System 24
LAGD 60 和 **LAGD 125**

have been designed and manufactured in accordance with:
DIRECTIVE 2014/34/EU OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of 26 February 2014 on the approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres as outlined in Harmonised Standards

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EC-Type Approval:
KEMA 07ATEX0132 X

CE 0537

IECEx Certificate of Conformity:
IECEx DEK 15.0066X

Where in X denotes: –20°C ≤ Ta ≤ + 60°C (LAGD 60/... and LAGD 125/...)
appropiate measures must be taken to prevent electric discharge

欧洲 ROHS 指令 2011/65/EU

Nieuwegein，荷兰, 2016年4月4日

Sébastien David
产品研发与质量经理

安全需知

为了避免在危险区域释放静电，只允许采用湿洗法。

1. 技术参数

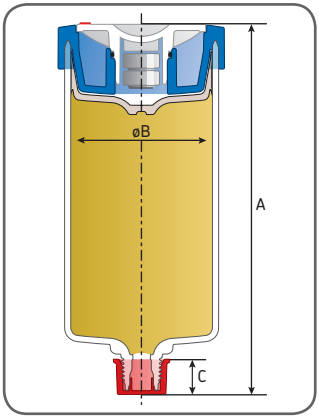
润滑脂容量 LAGD 60	60 ml
润滑脂容量 LAGD 125	125 ml
正常放空时间	可调节；1-12个月
环境温度范围 LAGD 60/125	-20 °C — 60 °C
防爆认证	II 1G Ex ia IIC T6 Ga II 1D Ex ia IIIC T85°C Da I M1 Ex ia I Ma
防护等级	IP 68
最大工作压强	5 巴*
动力源	增压惰性气体
连接螺纹	R 1/4
推荐保存温度	+20 °C
仓储年限	2 年 **
重量 LAGD 60	约130 g（含润滑脂）
重量 LAGD 125	约185 g（含润滑脂）
订货号	LAGD 125/WA2 (所装润滑脂为 LGWA 2) LAGD “容量”/“润滑脂牌号”

* 装满润滑脂的自动润滑器装到有完全密闭的润滑点上的最大内部压强。

** 仓储时间为2年，应从自动润滑器侧面上印刷的出厂日期算起。经2年仓储后，自动润滑器还有最长12个月的使用时间。

空的SKF SYSTEM 24自动润滑器只用于装油，且必须与一个单向阀门配合使用。

	LAGD 125		LAGD 60	
	mm	inch	mm	inch
A	118	4.645	86	3.386
øB	50	1.968	50	1.968
C	11	0.433	11	0.433



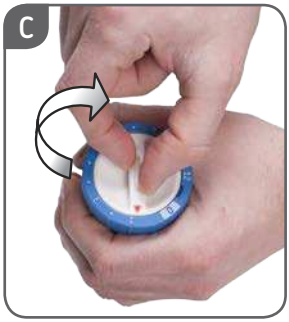
中文

2. 安装

1. 在自动润滑器上用防水笔写下安装日期。(图 A)
2. 取下自动润滑器的出油端的螺帽。(图 B)
3. 旋转自动润滑器的刻度盘，激活自动润滑器。(图 C)
4. 清洁设备上的润滑点及其周围区域。
5. 取下润滑点上原有的自动润滑器或者旧的润滑设备。
6. 装上新的自动润滑器，用手拧紧。(图 D)
7. 建议在手动润滑的每段正常间隔时间内，检查一次轴承的状况和自动润滑器活塞的位置。

当该润滑点是第一次使用SYSTEM 24自动润滑器时：

1. 确认SYSTEM 24中的润滑脂满足应用要求。
2. 润滑管路和轴承已填满了润滑脂。
3. 若是改变了润滑脂品牌或牌号，请确认润滑脂是兼容的。
4. 确认环境温度处于可接受的范围之内。如果环境温度连续长时间处于+40 °C之上，为获得最佳润滑效果，设置的配送速度不要超过6个月。
5. 确认自动润滑器向需要润滑的轴承或其它机器部件供脂。
6. 请确认安装SYSTEM24的同一个润滑点上没有采用油脂枪进行润滑的润滑脂嘴。
7. 安装自动润滑器到轴承的距离，使用润滑脂时不要超过300mm，使用油时不要超过1 500mm。
8. 请只使用孔径为6mm的油管。
9. 保护自动润滑器不受冲击或振动。请使用紧固夹LAPP 4保护自动润滑器或者远距离安装。
10. 保护自动润滑器不要过热或者是有突然的温度变化。



说明：
- 将刻度盘上的时间设置为0，自动润滑器可以短暂地停止工作。
- 该自动润滑器可以装到各种地方，已通过IP 68防护认证，可以装到水下。
- 装油的自动润滑器标配有单向阀，请不要把它取下来。
- 空的SKF SYSTEM 24自动润滑器仅用于润滑油，必须与单向阀一起使用。

3. 设置配送时间

SKF推荐选择以下方法之一设置自动润滑器的配送时间。

3.1. 基于经验的设置

如果对以前用的自动润滑器所设置的配送时间满意，请对新的自动润滑器设置同样的时间。

3.2. 润滑脂加注枪等效时间

设置自动润滑器的配送时间以保证轴承获得的补充润滑量与之前使用润滑脂加注枪的供给量相当。
例如：
- 轴承“X”每月获得SKF手动润滑脂加注枪（SKF 1077600）10次泵压的润滑脂量。
- 每次完全泵压 = 1.5 cm^3.

对LAGD 60
- LAGD 60自动润滑器装有60ml的润滑脂，60 ml = 60 cm^3。
- 60 cm^3除以1.5 cm^3 = 40 次泵压
- 每月10次泵压，40次泵压除以10 = 4 个月。

因此，将自动润滑器的配送时间设为4个月。

对LAGD 125
- LAGD 125自动润滑器装有125 ml的润滑脂，125 ml = 125 cm^3。
- 125 cm^3除以1,5 cm^3 = 83 次泵压
- 每月10次泵压，83次泵压除以10 = 8.3个月。

因此，将自动润滑器的配送时间设为8个月。

3.3 软件**DialSet 4.0**

DialSet为补充润滑计算软件，它可以很方便地算出SKF SYSTEM 24自动润滑器和SYSTEM MultiPoint多点自动润滑器所需的设置时间。DialSet软件和说明文件MP 3501可以从SKF维护与润滑产品网站www.mapro.skf.com下载。

3.4 润滑剂选型服务**SKF LubeSelect**

润滑剂选型服务SKF LubeSelect 为客户提供在线服务，帮助客户根据轴承轻松选择正确的润滑剂和润滑器。
可在登陆@ptitude exchange后选择SKF LubeSelect for SKF grease 浏览相关内容。

中文

4. 激活周期

激活后，开始供给润滑脂之前，自动润滑器有一个时间延迟。延迟的长短与所设置的配送时间和工作温度有关。在多数情况下，带轴承座轴承中的润滑剂可进行充分的润滑。在更改时间设置前，每月运行自动润滑器一天，可减少激活周期。

4.1. 对时间设置的影响

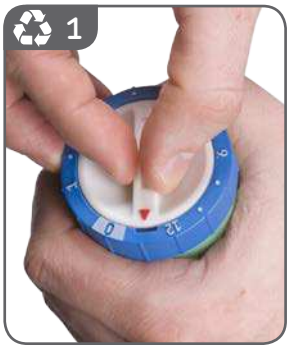
配送速度会被润滑管道的阻力和环境温度所影响。
当环境温度低于-10 °C，配送速度（时间）将会是润滑器所设置时间的两倍。若环境温度高于+40 °C，流完的时间则大约是自动润滑器所设置时间的一半。

5. 故障排除

故障	可能原因	排障措施
自动润滑器不送油脂或者是配送速度太慢	刻度盘调节不对	重新调节配送速度
	自动润滑器没有激活	激活自动润滑器的设置刻度盘
	润滑管路堵塞	请用润滑脂加注枪向润滑管路强行打压润滑脂，清除堵塞
	阻力过高	请确保： - 多余的润滑脂可以流出来 - 润滑油管不长于300 mm - 润滑油管孔径为6 mm - 润滑点适用于气动润滑器
润滑脂配送速度太快	刻度盘调节不对	重新调节配送速度
	温度短时间的影响	不需要纠正
在活塞和润滑脂之间有空气	装到机器的时间超过了刻度盘上所设置的时间	请更换自动润滑器
	环境温度高于可接受温度	更换自动润滑器， 作好在高温度环境下对自动润滑器的保护
自动润滑器油嘴断裂	振动过大或受到撞击	请使用LAPC 50紧固夹或LAPP 4保护板
若自动润滑器还有问题，请联系当地SKF SYSTEM 24 经销商。		

中文

LAGD 60/125以及润滑剂的材料安全数据表可登陆www.mapro.skf.com查阅。



6. 废品清理建议

在清理之前，将自动润滑器的各个部件拆除。

1. 将刻度盘上的箭头转向螺丝刀插槽。
2. 将螺丝刀插入螺丝刀插槽。
3. 将刻度盘从自动润滑器中撬出。
4. 自动润滑器部件的丢弃处理一定要符合当地的法规。

- 用过的自动润滑器为工业废品（油、润滑脂 、过滤器…）
  欧盟废品编号：150110
- 用过的带电池的刻度盘为废弃电池。
  欧盟废品编号：160604
- 用过的电阻板为电子废品。

7. 附件

订货号	产品描述
LAPA 45	45° 角接头
LAPA 90	90° 角接头
LAPB 3X4E1	润滑刷 3 x 4 cm*
LAPB 3X7E1	润滑刷 3 x 6 cm*
LAPB 3X10E1	润滑刷 3 x 10 cm*
LAPB 5-16E1	升降机导轨润滑刷*
LAPC 50	夹具
LAPE 35	延长管 35 mm
LAPE 50	延长管 50 mm
LAPF F1/4	内螺纹管接头 G 1/4
LAPF M1/4	外螺纹管接头 G 1/4
LAPF M1/8	外螺纹管接头 G 1/8
LAPF M3/8	外螺纹管接头 G 3/8
LAPG 1/4	润滑油嘴 G 1/4
LAPM 2	Y型转接头
LAPM 4	4合1组合 G 1/2
LAPN 1/8	螺纹转接头 G 1/4 - G 1/8
LAPN 1/2	螺纹转接头 G 1/4 - G 1/2
LAPN 1/4	螺纹转接头 G 1/4 - G 1/4
LAPN 1/4UNF	螺纹转接头 G 1/4 - G 1/4 28 UNF
LAPN 3/8	螺纹转接头 G 1/4 - G 3/8
LAPN 6	螺纹转接头 G 1/4 - M6
LAPN 8	螺纹转接头 G 1/4 - M8
LAPN 8X1	螺纹转接头 G 1/4 - M8x1
LAPN 10	螺纹转接头 G 1/4 - M10
LAPN 10X1	螺纹转接头 G 1/4 - M10x1
LAPN 12	螺纹转接头 G 1/4 - M12
LAPN 12X1.5	螺纹转接头 G 1/4 - M12x1,5
LAPP 4	保护座
LAPT 1000	油管, 1 000 mm 长 8 x 6mm
LAPV 1/4	单向阀 G 1/4
LAPV 1/8	单向阀 G 1/8

* *SYSTEM 24*自动润滑器只用于装油。

中文

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