

제품보증기간

제품의 보증기간은 구매일로부터 1년입니다. 제품보증은 제품의 결함에 국한되며, 사용자의 취급 부주의 및 부적절한 사용으로 인한 부수적인 피해에는 해당하지 않습니다.

주의사항

- ▶ 지정된 배터리 (B001/LB001)만 사용하십시오.
- ▶ 폭발 위험 장소 내에서는 배터리를 교체하지 마십시오.
- ▶ 폭발 위험 장소 내에서는 제품을 열거나 분해하지 마십시오.
- ▶ 잠재적인 정전기 방전 위험이 있으므로 젖은 천이나 형광을 사용하여 닦아주십시오.
- ▶ 해당 제품은 관련 법령 및 폐기를 처리 기준에 따라 폐기해 주십시오.

- * 온도 등급은 제품 인증란의 취득 등급을 참고하십시오.
- * 제조연도는 제품에 표시된 일련번호로 확인하십시오.
- * 방폭기기는 KS C IEC60079-14 규정에 따라 설치하십시오.
- * Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

- * This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions :
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

- * This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

제품사양

제품명	구분	용량(ml)
Pulsarlube LK-EXPL(r)/EXPL(r)	LK-EXPL(r)60, EXPL(r)60	60
	LK-EXPL(r)125, EXPL(r)125	125
	LK-EXPL(r)250, EXPL(r)250	250

상세사양

항목	상세 설명
작동 압력	보증 30bar (435psi) / 최대 60bar (870psi)
배터리 사용 온도	표준 배터리팩 : -18°C ~ 50°C 리튬 배터리팩 : -40°C ~ 50°C
LCD 화면	백라이트
설치 나사 크기	PT 3/8" Male
설치 유형	단독설치 / 다중설치

Energizer : MAX E91, IEC-LR6, Zinc-Manganese Dioxide (Zn/MnO2), 1.5V / LR1, IEC-FR6, Lithium/Iron Disulfide (Li/FeS2), 1.5V
DURACELL : MN1500, IEC-LR6, Zinc-Manganese Dioxide (Zn/MnO2), 1.5V

Applied Standards
IEC 60079-0:2017, IEC 60079-11:2011, EN IEC 60079-0:2018, EN 60079-11:2012, 고용노동부고시 제2021-22호

제품인증

Product Description	Automatic Single Point Lubricator
Product Name	Pulsarlube LK-EXPL(r)/EXPL(r)
Type	LK-EXPL(r)60/EXPL(r)60, LK-EXPL(r)120/EXPL(r)120, LK-EXPL(r)240/EXPL(r)240, LK-EXPL(r)480/EXPL(r)480

Pulsarlube EXPL(r)

II 3 G Ex ic IIB T4 Gc
DEKRA 25ATEX0086X
-18°C ≤ Ta ≤ 50°C (Alkaline batteries)
-40°C ≤ Ta ≤ 50°C (Lithium batteries)

Ex ic IIB T4 Gc
25-KA2B0-xxxxX
-18°C ≤ Ta ≤ 50°C (Alkaline batteries)
-40°C ≤ Ta ≤ 50°C (Lithium batteries)

Ex ic IIB T4 Gc
IECEX KLT 25.0017X
-18°C ≤ Ta ≤ 50°C (Alkaline batteries)
-40°C ≤ Ta ≤ 50°C (Lithium batteries)

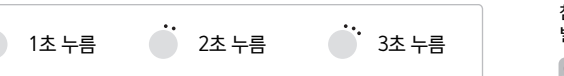
Pulsarlube LK-EXPL(r)

II 3 G Ex ic IIB T4 Gc
DEKRA 25ATEX0086X
-18°C ≤ Ta ≤ 50°C (Alkaline batteries)
-40°C ≤ Ta ≤ 50°C (Lithium batteries)

Ex ic IIB T4 Gc
25-KA2B0-xxxxX
-18°C ≤ Ta ≤ 50°C (Alkaline batteries)
-40°C ≤ Ta ≤ 50°C (Lithium batteries)

Ex ic IIB T4 Gc
IECEX KLT 25.0017X
-18°C ≤ Ta ≤ 50°C (Alkaline batteries)
-40°C ≤ Ta ≤ 50°C (Lithium batteries)

버튼 사용방법



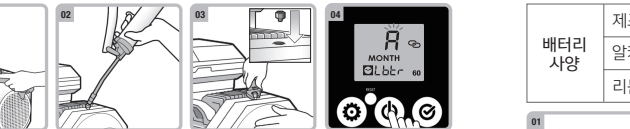
1 전원 켜 버튼 3초간 눌러 전원을 켜다

2 잠금 해제 버튼 3초간 눌러 잠금을 해제한다

3 전원 끄 버튼 5초간 눌러 전원을 끈다

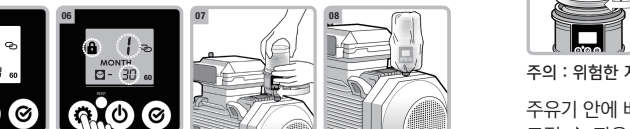
초기 설치방법

참고 : 그리스가 충전되지 않은 제품을 구매하신 경우, 별도로 구입한 서비스팩 설치 시 아래 지침을 참고하십시오.



그리스 주입구(Nipple) 주변의 오염물질 제거 → 그리스 주입하여 관로 확보(기존 그리스와 동충, 호환 그리스 사용) → 니플을 풀고 액세서리(Reducer) 체결 → 제품 체결 완료

급유주기 설정

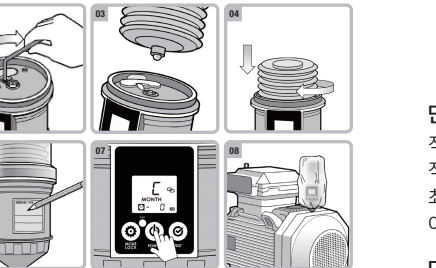


을 3초간 눌러 제품 켜 (구매사양 맞는지 LCD 액정 확인) → 을 눌러 급유 주기 선택 → LCD에 () 가 나타나면 급유 주기 설정 완료 → 동충된 더스트 커버를 주유기에 씌움

서비스팩 교체 방법

참고 : 서비스팩 용량과 구성품을 확인하세요. (배터리팩, 그리스파우치, 더스트커버, 메모라벨)

제조사명	KLT / Use only on LK-EXPL(r) / EXPL(r) / Electrical Rating : 4.5V
알카라인 배터리팩 (B001)	AA (LR6), 3ea, Energizer or Duracell
리튬 배터리팩 (LB001)	AA (FR6), 3ea, Energizer

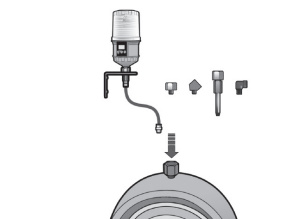


주의 : 위험한 지역에서는 배터리를 교체하지 마세요.

주유기 안에 배터리팩 교체 → 육각 렌치를 이용하여 잠금 장치를 고정 → 파우치를 눌러 그리스를 조금 짤 후 주유기를 체결 → 파우치를 강하지 않게 돌려 장착 → 하우징을 체결 → 메모라벨 부착 후 설치일 표기 → 전원을 켜 후 리셋 진행 → 급유 개소에 제품을 설치 → 더스트 커버를 씌움

설치방법

단독 급유 / 다중 급유 설치



단독 급유

직결 설치 및 튜브를 이용한 원격 설치
직결 또는 원격 설치 시 액세서리를 사용하고 전체 관로의 길이는 최소화합니다. 튜브 이용 시, 동충의 그리스가 장입된 외경 6mm 이상의 튜브 사용을 권장합니다.

다중 급유

분배변 (2~8구)을 이용한 다중/원격 설치
전체 관로의 차압 (분배변 포함)이 30bar (435psi) 이하인 경우에 사용 가능합니다.
▶ 자세한 내용은 분배변 사용자 설명서를 참조 하십시오. (홈페이지 > 서브 > 기술정보 참조)
▶ 다중 급유 시에는 리튬 배터리 팩을 사용해야 합니다.

이상시 대처방법

EXPL(r) LK-EXPL(r)
5-00 (Sensor)
증상 : 모터 행정 인식 센서가 검출되지 않을 때 급유 중단
원인 : 모터 행정 인식 센서 고장
대처 : 제조사 문의

EXPL(r) LK-EXPL(r)
bP00 (BPSM) *Back Pressure Sensing Mode
증상 : 높은 역압으로 인한 급유 중단
원인 : 관로가 꺾였거나 구부러져 있음 / 베어링 급유 관로 막힘
대처 : 관로의 전체 부하 확인 / 원격 설치 거리 줄이기 / 베어링 급유 포트 이물질 제거

EXPL(r) LK-EXPL(r)
Ch00 (Check)
증상 : 모터 구동 안됨
원인 : 모터에 전원 공급이 안되는 경우
대처 : 제조사 문의

EXPL(r) LK-EXPL(r)
증상 : LCD 문자불량, LCD 부분 번개
원인 : CPU또는LCD 이상
대처 : 재설정 (RESET) 후 동일증상 반복 시 제조사 문의

필사루브 LINK 시스템

LINK 시스템은 게이트웨이를 통해 원격으로 모니터링이 가능한 관제 플랫폼입니다.

*해당 기능은 LK-EXPL(r) 모델에만 적용됩니다.
*영업자와 상담 후 사용에 주세요.



www.pulsarlube-link.co.kr



온라인 매뉴얼

자세한 내용은 온라인 매뉴얼을 참고하십시오.



Online User Manual

Please refer to the online manual for more details.

Shelf life and Warranty

The product warranty is limited to original defects in materials and workmanship, and does not cover any collateral damage resulting from mishandling, abuse, or any other inappropriate use of the product.

Warning

- ▶ Use only OEM battery pack (B001/LB001)
- ▶ Do not replace battery when an explosive atmosphere is present
- ▶ Do not open when an explosive atmosphere is present
- ▶ Potential electrostatic charging hazard - clean with damp cloth
- ▶ When installing the housing onto the main body, please make sure to rotate the housing clockwise until it "clicks" in.
- ▶ Follow local and national waste disposal guidelines when discarding this product.

* For temperature range and battery selection, please refer to certificate details.
* Year of manufacture is indicated in a serial number on the marking of the product.
* Explosion-proof equipment shall be installed in compliance with KS C IEC60079-14.

* Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

* This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions :
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

* This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Specifications

Product Name	Type	Grease Capacity(ml)
Pulsarlube LK-EXPL(r)/EXPL(r)	LK-EXPL(r)60, EXPL(r)60	60
	LK-EXPL(r)125, EXPL(r)125	125
	LK-EXPL(r)250, EXPL(r)250	250

Detailed Specifications

Specifications	Description
Operating Pressure	Avg.30 (435psi) / Max.60bar (870psi)
Operating Temperature of Battery	Alkaline Battery : -18°C ~ 50°C (-0.4°F ~ 122°F) Lithium Battery : -40°C ~ 50°C (-40°F ~ 122°F)
LCD Display	Blue backlight display
Installation Thread Size	PT 3/8" Male
Installation Types	Single Point / Multi-Point

Energizer : MAX E91, IEC-LR6, Zinc-Manganese Dioxide (Zn/MnO₂), 1.5V / L91, IEC-FR6, Lithium/Iron Disulfide (Li/FeS₂), 1.5V
DURACELL : MN1500, IEC-LR6, Zinc-Manganese Dioxide (Zn/MnO₂), 1.5V

Applied Standards
IEC 60079-0:2017, IEC 60079-11:2011, EN IEC 60079-0:2018, EN 60079-11:2012, Public Notice No. 2021-22 of the Ministry of Employment and Labor

Certificates

Product Description	Automatic Single Point Lubricator
Product Name	Pulsarlube LK-EXPL(r)/EXPL(r)
Type	LK-EXPL(r)60/EXPL(r)60, LK-EXPL(r)120/EXPL(r)120, LK-EXPL(r)240/EXPL(r)240, LK-EXPL(r)480/EXPL(r)480

Pulsarlube EXPL(r)

II 3 G Ex ic IIB T4 Gc
DEKRA 25ATEX0086X
-18°C ≤ Ta ≤ 50°C (Alkaline batteries)
-40°C ≤ Ta ≤ 50°C (Lithium batteries)

Ex ic IIB T4 Gc
25-KA2B0-xxxxX
-18°C ≤ Ta ≤ 50°C (Alkaline batteries)
-40°C ≤ Ta ≤ 50°C (Lithium batteries)

Ex ic IIB T4 Gc
IECEX KLT 25.0017X
-18°C ≤ Ta ≤ 50°C (Alkaline batteries)
-40°C ≤ Ta ≤ 50°C (Lithium batteries)

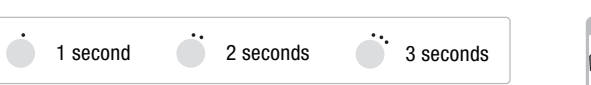
Pulsarlube LK-EXPL(r)

II 3 G Ex ic IIB T4 Gc
DEKRA 25ATEX0086X
-18°C ≤ Ta ≤ 50°C (Alkaline batteries)
-40°C ≤ Ta ≤ 50°C (Lithium batteries)

Ex ic IIB T4 Gc
25-KA2B0-xxxxX
-18°C ≤ Ta ≤ 50°C (Alkaline batteries)
-40°C ≤ Ta ≤ 50°C (Lithium batteries)

Ex ic IIB T4 Gc
IECEX KLT 25.0017X
-18°C ≤ Ta ≤ 50°C (Alkaline batteries)
-40°C ≤ Ta ≤ 50°C (Lithium batteries)

Buttons

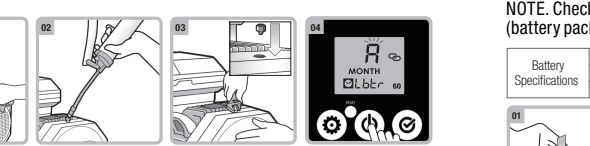


1 Power On
Press and hold for 3 seconds to turn the unit on.

2 Unlock
Press and hold for 3 seconds to deactivate 'Auto Lock Out' mode.

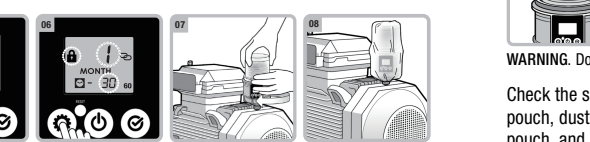
3 Power Off
Press for 5 seconds to turn off LCD screen.

Dispensing Settings



Remove contaminants around the lube point. → Ensure a clear passage by purging the lube point with a manual grease gun. (Use the same or compatible grease.) → Remove the grease nipple and install appropriate adaptors. → Install lubricator.

Installation Guidelines

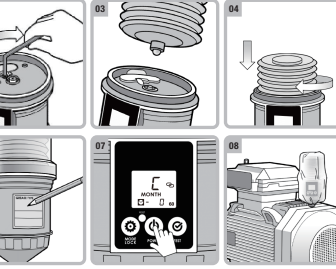


Press for 3 seconds to turn the unit on. (Check LCD screen to make sure your purchased grease capacity.) → Press to select the dispensing period. The setup is complete if () appears on LCD screen. → Install the dust cover over the lubricator for added protection.

Service Pack Replacement Guidelines

NOTE. Check the Service Pack capacity and components (battery pack, grease pouch, dust cover & label)

Battery Specifications	Manufacturer Name : KLT / Use only on LK-EXPL(r)/EXPL(r)/Electrical Rating : 4.5V Alkaline Battery Pack (B001) : AA (LR6), 3ea, Energizer or Duracell Lithium Battery Pack (LB001) : AA (FR6), 3ea, Energizer
------------------------	---

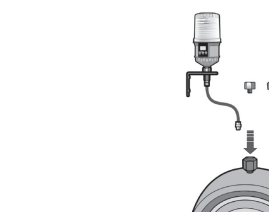


WARNING. Do not replace the battery in hazardous areas.

Check the service pack capacity and components (battery pack, grease pouch, dust cover, & label). → Remove the top housing, empty grease pouch, and used battery pack. → Insert new battery pack. Make sure the battery clamp is firmly locked. Purge the grease pouch until grease comes out of the tip and install. Do not overtighten. → Place housing back onto the lubricator. → Attach the enclosed label to the lubricator and note the installation date. → Power on and reset the lubricator. → Install the lubricator on the lube point. → Install the dust cover over the lubricator for added protection.

Mounting Methods

Direct Mount / Single Point Remote Installation



Single Point Remote Installation (Alkaline, Lithium Battery)

Direct Mount or Remote Installation using Extension Tube

For applications not allowing any direct mounts, remotely mount the unit using appropriate accessories and keep the distance from the lube point as short as possible. For remote installation using a tube, use a Ø6 (1/4") tube pre-filled with the same or compatible grease as the grease contained in the unit.

Multi-Point Installation (Lithium Battery Only)

Multi-Point Remote Installation using Progressive Divider Block (2~8 points)
Ensure the break-off pressure is below the average operating pressure of 30bar (435psi).

- ▶ For more information, please refer to the distributor user manual. (Reference: Website > Service Menu > Technical Information)
- ▶ Lithium battery pack is required for all multi-point installations.

Troubleshooting Guidelines

(Sensor)
Error : Operation on hold due to non-detection of motor sensor
Possible Cause : Problem with the motor sensor
Solution : Contact your supplier

(BPSM) *Back Pressure Sensing Mode
Error : Excessive backpressure indication
Possible Cause : Hardened grease obstructing lube point or kinked lube line.
Solution : Purge grease into the lube point using a clean manual grease gun to eliminate possible hardened grease that may be causing an obstruction. This will alleviate excessive backpressure. Reduce the lube line length if possible.

(Check)
Error : Motor not responding
Possible Cause : Electric motor may not be able to activate due to possible electrical problem
Solution : Contact your supplier

(Blank LCD screen)
Error : Blank LCD screen
Possible Cause : CPU electrical malfunction or battery problem
Solution : Replace battery pack / Press reset button to restart the lubricator / Contact your supplier if problem persists

PULSARLUBE LINK SYSTEM

The LINK system is a remote monitoring platform that operates through a Pulsarlube Gateway.

*This feature is only available for the LK-EXPL(r) model.
*Please consult with your sales representative before use.



www.pulsarlube-link.com

Download on the App Store

GET IT ON Google Play

PULSARLUBE

KLT Co., Ltd.
경기도 파주시 탄현면 방촌로 955번길 34-12
Tel : 1833-8411 **Fax** : 02-2083-8485
www.pulsarlube.co.kr / klt_sales@pulsarlube.com

Pulsarlube USA, Inc.
1170 Ardmore Ave Itasca IL 60143, USA
Tel : +1- 847-593-5300 **Fax** : +1-847-593-5303
www.pulsarlube.com / info@pulsarlube.com

Pulsarlube GmbH
Silostr. 31b, 65929 Frankfurt am Main, Germany
Tel : +49 69 8700766-62/-63 **Fax** : +49 69 8700766-69
www.pulsarlube.de / [sales.eu\(at\)pulsarlube.com](mailto:sales.eu(at)pulsarlube.com)

Pulsarlube Asia Pacific
Room 1708, Building A, 135, Gasan digital 2-ro, Geumcheon-gu, Seoul, Korea
Tel : +82 (2) 2135-3788 **Fax** : +82 (2) 2083-8485
www.pulsarlube.com / sales.asia@pulsarlube.com

槽迅 (上海) 潤滑科技有限公司
上海市闵行区吴宝路255号力国大厦2楼218室
电话 : +86 (21) 6221-8211 / 传真 : +86 (21) 6221-9020
www.pulsarlube-cn.com / sales.china@pulsarlube.com

Manufacturer : KLT Co., Ltd. 34-12, Bangchon-ro 955beon-gil, Tanhyeon-myeon, Paju-si, Gyeonggi-do, Korea
EX-12-UM-06-R5 / Rev05 / date 250425

