

The Innovative Leader of Automatic Lubricators



# PULSARLUBE

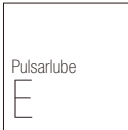
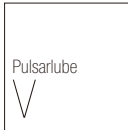












Master Catalog



**PULSARLUBE**

The Best Lubrication Solutions

<b>Introduction</b>	<b>02</b>	Company Introduction
	<b>04</b>	Why Use Pulsarlube?
<b>Applications</b>	<b>06</b>	Pulsarlube at a Glance
	<b>08</b>	Industries & Applications

<b>Products</b>	<b>10</b>	Electrochemical				
	<b>14</b>	Electromechanical				
	<b>18</b>	Electromechanical - Synchronizing				
	<b>22</b>	Electromechanical - Remote Management				
	<b>26</b>	Oiler				
	<b>28</b>	Spring				

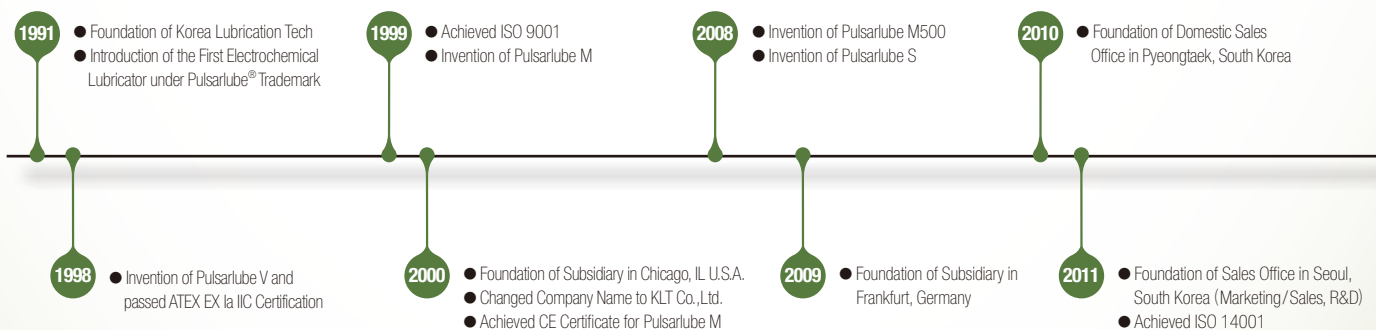
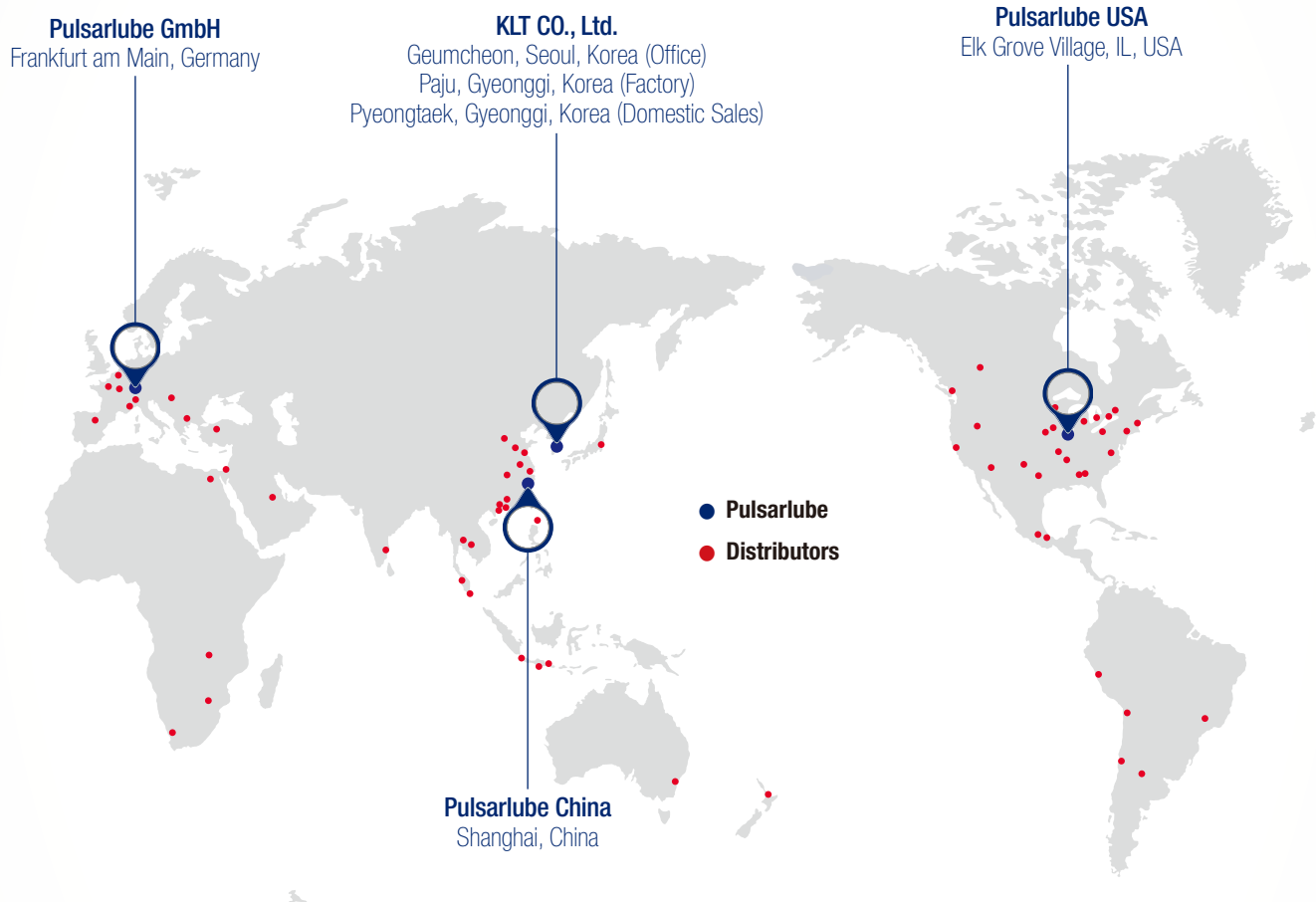
<b>Installations</b>	<b>30</b>	Pulsarlube Installation Options
	<b>32</b>	Pulsarlube Oiler Installation Options

<b>Guidelines</b>	<b>34</b>	Pulsarlube Grease Guide
	<b>35</b>	Pulsarlube Application Guide
	<b>36</b>	Pulsarlube Dispensing Recommendations
	<b>37</b>	How To Order

## Company Introduction

Utilizing patented cutting edge microprocessor technology, **PULSARLUBE®** provides the most innovative and reliable Automatic Single Point Lubricator on the market. Backed by years of research and development PULSARLUBE offers a wide range of superior products to meet the needs of our customers.

**PULSARLUBE** provides high quality products and services worldwide through its well-established distribution network.





provides its customers with the highest quality assurance as well as continuous innovation to its cutting edge technology for the best lubrication solutions.



2012

● Invention of Pulsarlube E & passed IECEx/ATEX/UL Certification

2014

● Invention of Pulsarlube Mi

2016

● Launch of Customized Lubricant Business

2018

● Invention of electromechanical Pulsarlube EXPL  
● Invention of Pulsarlube BT

2013

● Foundation of Sales Office in Shanghai, China

2015

● Invention of Pulsarlube PLC

2017

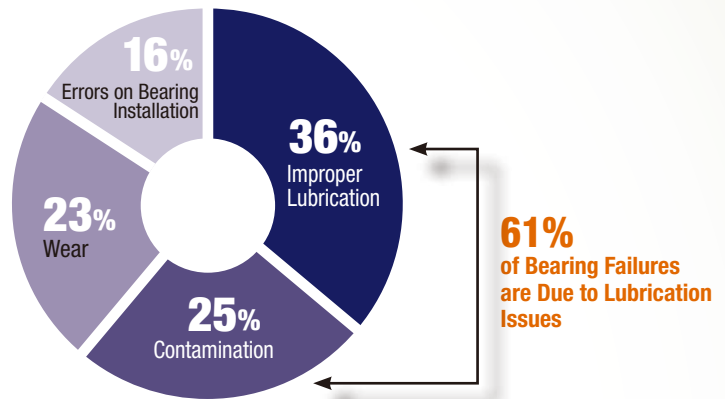
● Invention of Pulsarlube EXP

2019

● Invention of Pulsarlube AIR

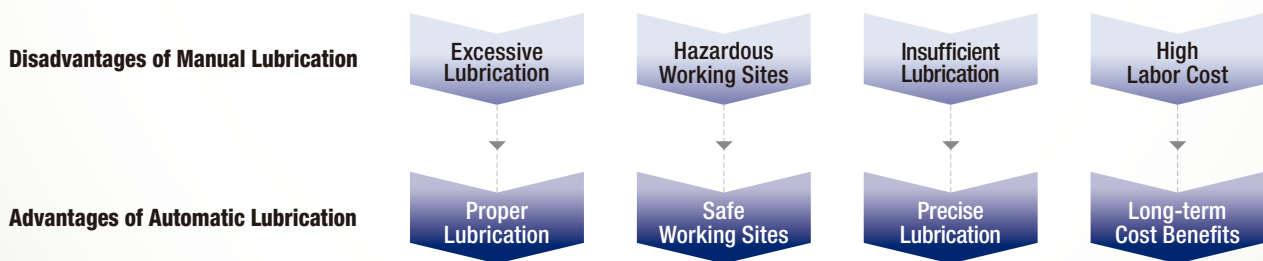
# Is Your Equipment Well Maintained?

Many organizations are aware that excellent lubrication is a crucial step and a good investment to optimize machinery life. However in reality, the lubrication budget is often treated as secondary and is frequently one of the first areas for budget cuts. It can be difficult to find the right way, the right time, and the right amount to lubricate while determining what the “best lubrication solution” is for your machinery because optimum lubrication practices require skill, time, manpower, and money. PULSARLUBE offers a variety of lubrication products to solve all of your lubrication needs.



# We Provide The Best Lubrication Solutions For Your Machinery

Accurate automatic lubrication can extend bearing life which will reduce replacement/repair cost and avoid unnecessary downtimes.



Pulsarlube is the most effective solution to lubricate your equipment.

# Pulsarlube Automatic Lubricators: A Variety of Lubrication Solutions for Most Applications and Environments

Pulsarlube lubricators demonstrate definitive advantages over the competition.



## High Operating Pressure

High operating pressures enables customers to have a variety of installation methods and options.

# 10m

Up to 10m (33ft) for  
single point remote installations.

# 8 points

Up to 8 lube points for  
multi-point lubrication.



## Wide Temperature Range

Our technology offers benefits in a wide range of ambient temperatures.

# N<sub>2</sub>

Inert nitrogen gas is less affected by  
changes in ambient temperature.

# Lithium Battery

Optional lithium battery offers excellent  
performance in low temperatures.

Pulsarlube offers a variety of solutions that can significantly increase your bottom line.

# Pulsarlube Product Line

## Total Lubrication Solutions

### Pulsarlube **E**

**Features**

Intrinsically Safe, Compact, Economical, Submersible

**Replacement Method**

Disposable

**Operating Pressure**

Max. 5bar (73psi)

**Grease Pouch Capacity**

60/120/240ml



#### Electrochemical

### Pulsarlube **V**

**Features**

Intrinsically Safe, LCD Display, Advanced Microprocessor, Controlled Gas Generation

**Replacement Method**

Disposable

**Operating Pressure**

Max. 5bar (73psi)

**Grease Pouch Capacity**

125/250ml



### Pulsarlube **M**

**Features**

High Operating Pressure, Multi-Point Lubrication Capabilities, and Low Temp Capabilities

**Replacement Method**

Service Pack Replacement

**Operating Pressure**

30~60bar (435~870psi)

**Grease Pouch Capacity**

60/125/250/500ml



#### Electromechanical

### Pulsarlube **EXP/EXPL**

**Features**

Competitive Global Certifications for Use in Hazardous Locations, Multi-Point Lubrication Capabilities

**Replacement Method**

Service Pack Replacement

**Operating Pressure**

30~60bar (435~870psi)

**Grease Pouch Capacity**

60/120/240/480ml



### Pulsarlube **MS & MSP**

**Features**

Efficient Lubrication by Synchronizing Operation to Machine's Electrical Power

**Replacement Method**

Service Pack Replacement

**Operating Pressure**

30~60bar (435~870psi)

**Grease Pouch Capacity**

60/125/250/500ml



#### Electromechanical - Synchronizing

### Pulsarlube **Mi**

**Features**

Efficient Lubrication by Synchronizing Operation to Machine's Vibration. No Electrical Wiring Needed.

**Replacement Method**

Service Pack Replacement

**Operating Pressure**

30~60bar (435~870psi)

**Grease Pouch Capacity**

60/125/250ml



## Pulsarlube **BT**

### **Features**

Bluetooth-enabled  
Automatic Electromechanical Lubricator

### **Replacement Method**

Service Pack Replacement

### **Operating Pressure**

30–60bar (435–870psi)

### **Grease Pouch Capacity**

60/120/240ml



## Electromechanical - Remote Management

## Pulsarlube **PLC**

### **Features**

Manage Dispensing Rates through PLC, Signal Out to External Alarm for Warning / Error Messages

### **Replacement Method**

Service Pack Replacement

### **Operating Pressure**

30–60bar (435–870psi)

### **Grease Pouch Capacity**

60/120/240/480ml



## Pulsarlube **OL500**

### **Features**

Refillable, Compatible with a Wide Range of Oil Viscosity, Multi-Point Capability

### **Replacement Method**

Oil Refillable

### **Operating Pressure**

Max. 10bar (145psi)

### **Oil Reservoir Capacity**

500ml



## Oiler

## Pulsarlube **S**

### **Features**

Refillable, Unique Design Reduces Effects of Oil Separation

### **Replacement Method**

Refillable

### **Grease Pouch Capacity**

100ml



## Spring

## Pulsarlube **EO**

### **Features**

Compact, Economical

### **Replacement Method**

Disposable

### **Operating Pressure**

Max. 5bar (73psi)

### **Oil Reservoir Capacity**

60/120/240ml



## Industries & Applications



### Automotive

Chains  
Lifts  
Electric Motors  
Conveyors  
Loaders  
HVAC Systems



### Steel

Loaders  
Conveyors  
Electric Motors  
Blowers  
Fans  
Pumps



### Cement

Conveyors  
Electric Motors  
Blowers  
Fans  
Pumps



### Mining

Mobile Equipment  
Conveyors  
Electric Motors  
Pumps  
Crushers



### Pulp & Paper

Conveyors  
Electric Motors  
Blowers  
Pumps  
Paper Machines





**Petrochemical**

Electric Motors  
Blowers  
Pumps  
Air Compressors



**Power Plant**

Water Pumps  
Electric Motors  
Conveyors  
Boilers  
Air Handling Units  
Heaters



**Food & Beverage**

Conveyors  
Electric Motors  
Blowers  
Pumps  
Cooling Towers  
Air Handling Units



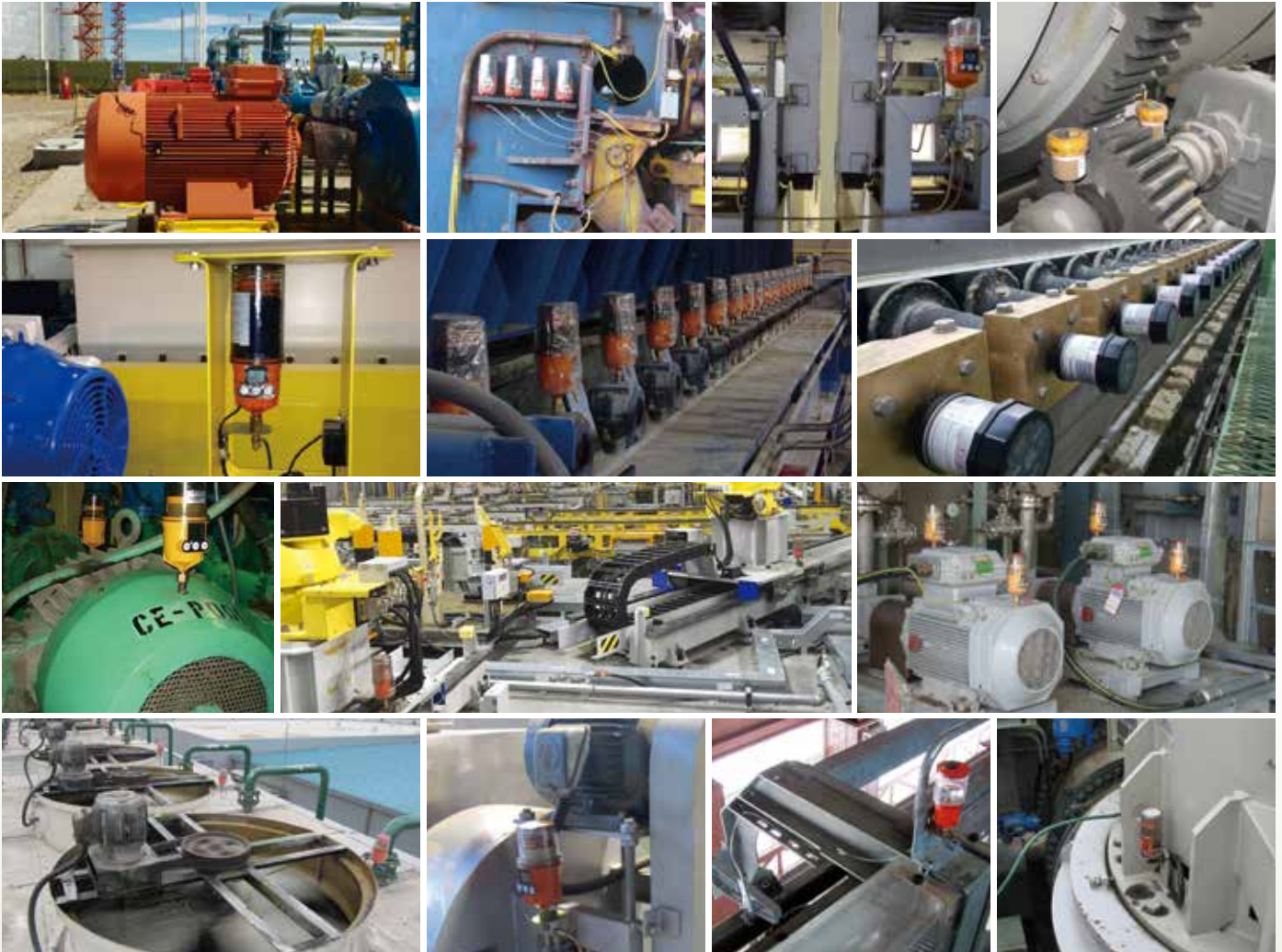
**Semiconductor**

Air Handling Units  
Clean Rooms  
Cooling Towers  
SMD PCB Lines  
LCD Panels  
Loader Robots  
Wet Scrubbers



**Marine**

Mooring Winch  
Doors  
Cranes  
Pumps  
Electric Motors



The Pulsarlube E has the **highest IP Rating** which makes it the perfect choice for your underwater application.



**IP68 IECEx**



# Pulsarlube E

## Compact & Economical

The Pulsarlube E features compact size which can easily be installed in confined areas with limited accessibility. This eco-friendly product is recyclable.

### Features & Benefits



Compact design is convenient for use in very confined spaces & Specially designed to endure high vibration



Eco-friendly product where applicable parts can be disposed of separately



CE, ATEX, UL certified for intrinsically safe use in hazardous locations



High IP rating protects against ingress of dust and water and allows underwater installation



### Specifications

**Grease Pouch Capacity**

60ml/120ml/240ml (disposable)

**Operating Method**

Electrochemical reaction (Nitrogen gas)

**Operating Pressure**

Max. 5bar (73psi)

**Operating Temperature**

-20°C~55°C (-4°F~131°F)

**Dispensing Periods**

1, 3, 6, 9, 12 month

**Remote Installation**

Max. 1m (3.3ft) with O.D. Ø8 tube

**Multi-Point Installation**

N/A

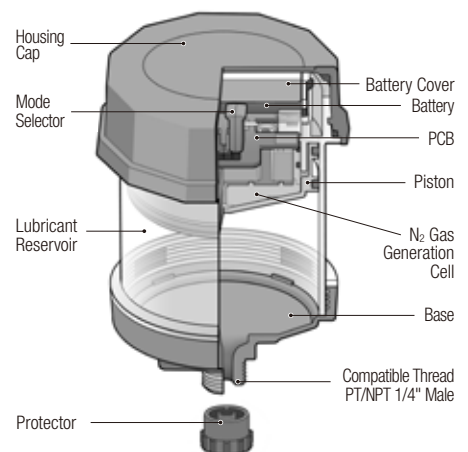
**IP Code**

IP68

**Product Certifications**

ATEX, UL, IECEx, KCs, CE, MSHA

### Cross Section



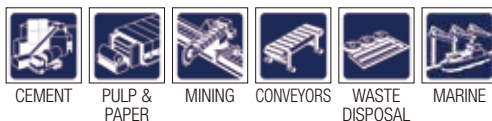
**Product Dimension**

E60 : Ø77(3.03") x 91mm (3.58") (H)

E120 : Ø77(3.03") x 111mm (4.37") (H)

E240 : Ø77(3.03") x 156mm (6.14") (H)

### Applications



The Pulsarlube V is **intrinsically safe** and can be used in **hazardous locations** containing flammable liquids, vapors, gasses, and dust.



IP68

IECEX



# Pulsarlube V

## Advanced Performance & Smart Operation

The Pulsarlube V is an easy-to-program gas type lubricator which offers a large user-friendly LCD display.

### Features & Benefits



Variable dispensing settings with a large informative LCD display & Easy to reprogram at any time with a press of a button



8-bit microprocessor controlled to ensure the most accurate dispensing rate



CE, ATEX, UL certified for intrinsically safe use in hazardous locations



High IP rating protects against ingress of dust and water and allows underwater installation



### Specifications

**Grease Pouch Capacity**  
125ml/250ml (disposable)

**Operating Method**  
Electrochemical reaction (Nitrogen gas)

**Operating Pressure**  
Max. 5bar (73psi)

**Operating Temperature**  
-20°C~55°C (-4°F~131°F)

**Dispensing Periods**  
1, 2, 3, 6, 12 month & Purge (P)

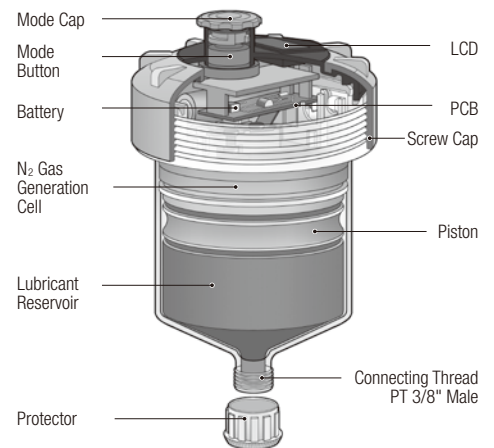
**Remote Installation**  
Max. 1m (3.3ft) with O.D. Ø8 tube

**Multi-Point Installation**  
N/A

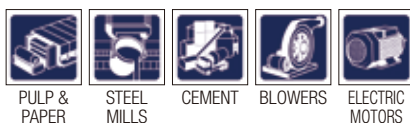
**IP Code**  
IP68

**Product Certifications**  
ATEX, UL, IECEx, KCs, CE, MSHA

### Cross Section



### Applications



**Product Dimension**  
V125 : Ø97(3.81") x 128mm(5.04") (H)  
V250 : Ø97(3.81") x 166mm(6.53") (H)

# Pulsarlube M

## Unrivaled Power & Long-Term Reliability

The Pulsarlube M consists of a vertical feed pump and a microprocessor chip allowing an average operating pressure of 30bar (435psi). It is designed to ensure reliable lubrication and is a lubrication cost savings solution.



### Features & Benefits

<b>30bar</b>	High output pressure enables multi-point lubrication up to 8 points or over 30ft single point lubrication
<b>-40°C</b>	Covers low temp applications with use of lithium battery pack
<b>LCD</b>	Easy to program with built-in LCD and simple button controls
<b>Service Pack</b>	Substantial savings with the use of replaceable grease pouches and battery packs

### Specifications

#### Grease Pouch Capacity

60ml (pre-set)  
125ml/250ml  
(capacity setting available)  
500ml (pre-set)

#### Power Supply

DC 4.5V Battery Pack

#### Operating Pressure

30~60bar (435~870psi)

#### Operating Temperature

Standard Alkaline Battery :  
-15°C~60°C (5°F~140°F)  
Optional Lithium Battery :  
-40°C~60°C (-40°F~140°F)

#### Dispensing Periods

60ml : 1~12 month  
125ml/250ml : 1, 2, 3, 6, 12 month & H (15 days)  
500ml : 1, 2, 4, 6, 12, 18, 24 month & H (15 days)

#### Remote Installation

Max. 10m (33ft) with O.D. Ø6 tube

#### Multi-Point Installation

Max. 6m (20ft) with O.D. Ø6 tube  
(Up to 8 lube points)

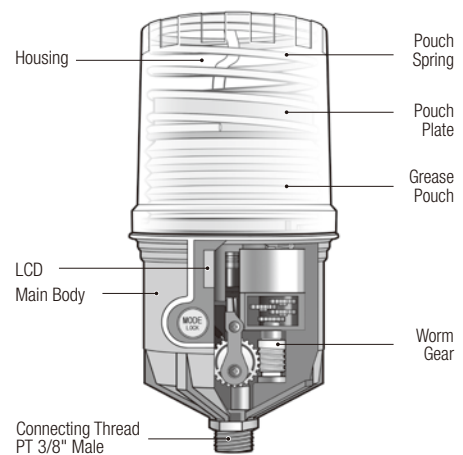
#### IP Code

IP54

#### Product Certifications

CE

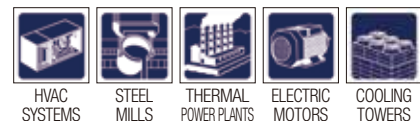
### Cross Section



#### Product Dimension

M60, M125 : Ø91(3.60") x 181mm (7.13") (H)  
M250 : Ø91(3.60") x 210mm (8.27") (H)  
M500 : Ø92(3.62") x 260mm (10.23") (H)

### Applications



# Service Packs

## Substantial Cost Savings

Pulsarlube electromechanical lubricators are reusable and bring cost saving benefits to customers with the use of a replacement kit, the Service Pack.

### A Service Pack consists of

A grease pouch of selectable lubricant type in various volumes

An OEM battery pack :

DC 4.5V Alkaline battery pack (standard) or DC 4.5V Lithium battery pack

\* Note : A battery pack is not included in MSP and PLC service packs.

A disposable dust cover :





PVC dust cover (standard) or UV protection dust cover

\* Note : A dust cover is not included in PLC service packs.

### Warning

The grease pouch and battery pack must always be replaced together at the end of each lubrication cycle to ensure reliable operation.

### Service Pack Sizes (Grease Pouch Capacity)

60ml	120/125ml
	
240/250ml	480/500ml
	

### Battery Pack Selection Guide

Applications	Alkaline Battery Pack (Standard)	Lithium Battery Pack (Optional)
Direct Mount	OK	OK
Operating Temp Range	-15°C~60°C (5°F~140°F)	-40°C~60°C (-40°F~140°F)
Programming	Up to 12 months	Up to 24 months
Remote Installation	Up to 3m (10ft) on a single line	Up to 6m (20ft) per line
Multi-Point Lubrication	Up to 8 points with max. 250ml capacity	Up to 8 points for all capacities
500ml Grease Pouch	Direct mount or short single point remote installation only	All types of installations

# Globally certified electromechanical lubricator for reliable lubrication in areas containing flammable medium.



II 3 G Ex ic IIC T5/T4 Gc  
DEKRA17ATEX0012X



Ex ic IIC T5/T4  
17-KA2B0-0115X

**IECEx** Ex ic IIC T5/T4 Gc  
IECEx KTL 17.0001X



Ex ic IIC T5/T4 Gc  
NEPSI GYJ17.1038X



單點式自動注油機 (PulsarJube EXP)  
EXP60  
Ex ic IIC T5/T4 Gc  
許用電壓: 4.5 Vdc  
TD040272  
KLT Co. Ltd

**CE IP65**



II 3 G Ex ic IIB T4 Gc  
DEKRA17ATEX0012X



Ex ic IIB T4  
18-KA2B0-0463X

**IECEx** Ex ic IIB T4 Gc  
IECEx KTL17.0001X



Ex ic IIB T4 Gc  
NEPSI GYJ17.1038X



Class I, Division 2, Groups A, B, C, & D, T4  
Class II, Division 2, Groups F, G, T4  
-18°C ≤ Tamb ≤ 54°C (Alkaline batteries)  
-30°C ≤ Tamb ≤ 50°C (Lithium batteries)  
Conforms to UL Std. 121201  
Intertek  
5011230  
Cert. to CSA Std. C22-2 NO. 213

**CE IP65**



# Pulsarlube EXP/EXPL

## Globally Certified for Use in Hazardous Areas

The Pulsarlube EXP/EXPL is specifically designed and certified for protection against explosive gases or dust existing in hazardous locations.

### Features & Benefits



Easy to check LCD display with backlight function



Reliable lubricator certified for safe use in hazardous areas



High operating pressure allows superior performance in its class



Substantial savings with the use of replaceable grease pouches and battery packs



\* For replacement kit information, please refer to Service Pack on Page 15.

### Specifications

#### Grease Pouch Capacity

60ml/120ml/240ml/480ml (pre-set)

#### Power Supply

DC 4.5V Battery Pack (replaceable)  
Standard : Alkaline Battery  
Optional : Lithium Battery

#### Operating Pressure

30~60bar (435~870psi)

#### Operating Temperature

EXP : 0°C~50°C  
EXPL : -15°C~50°C

#### Dispensing Periods

60ml : 1~12 month  
120ml~480ml :  
1, 2, 3, 6, 9, 12 month

#### Remote Installation

Lithium Battery :  
Max. 6m (20ft) with O.D. Ø6 tube

#### Multi-Point Installation

Lithium Battery : Max. 3m (10ft)  
with O.D. Ø6 tube (Up to 8 lube points)

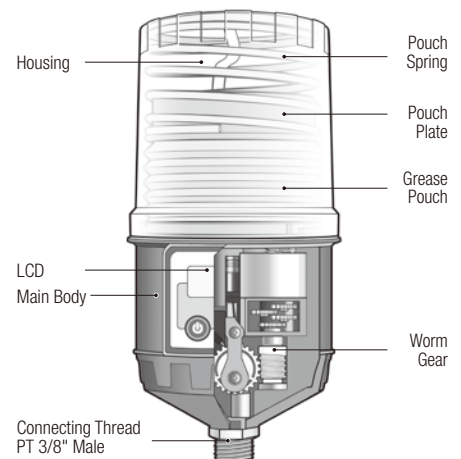
#### IP Code

IP65

#### Product Certifications

EXP : ATEX, IECEx, KCs, CE, NEPSI, TS  
EXPL : ATEX, ETL, IECEx, KCs, CE, NEPSI

### Cross Section



### Applications



PETROCHEMICAL PLANTS    NUCLEAR POWER PLANTS    OIL & GAS    THERMAL POWER PLANTS    ELECTRIC MOTORS

#### Product Dimension

EXP/EXPL60, EXP/EXPL120 : Ø91(3.60") x 181mm(7.13") (H)  
EXP/EXPL240 : Ø91(3.60") x 208mm(8.19") (H)  
EXP/EXPL480 : Ø92(3.62") x 260mm(10.23") (H)

# Pulsarlube MS & MSP

## Synchronize to Electrical Power

The Pulsarlube MS & MSP units offer the advantage of providing automatic lubrication to machinery that is infrequently or intermittently used by synchronizing itself to the equipment's electrical power, thereby avoiding the problem of over lubrication.



\* For replacement kit information, please refer to Service Pack on Page 15.

### Features & Benefits

<b>Synchronized</b>	Dispenses a preset amount of lubricant only when the equipment is in operation to prevent over lubrication
<b>30bar</b>	Robust operating pressure allows multi point lubrication up to 8 points, 20ft remote install per point
<b>LCD</b>	Easy to read LCD displays critical information
<b>Service Pack</b>	Substantial savings with the use of replaceable grease pouches and battery packs

### Specifications

#### Grease Pouch Capacity

60ml (pre-set)  
125ml/250ml  
(capacity setting available)  
500ml (pre-set)

#### Power Supply

MS : DC 4.5V Battery Pack  
MSP : External Power Supply  
(DC or AC)

#### Operating Pressure

30~60bar (435~870psi)

#### Operating Temperature

Standard Alkaline Battery :  
-15°C~60°C (5°F~140°F)  
Optional Lithium Battery :  
-40°C~60°C (-40°F~140°F)

#### Dispensing Periods

60ml : 1~12 month  
125ml/250ml : 1, 2, 3, 6, 12 month & H (15 days)  
500ml : 1, 2, 4, 6, 12, 18, 24 month & H (15 days)

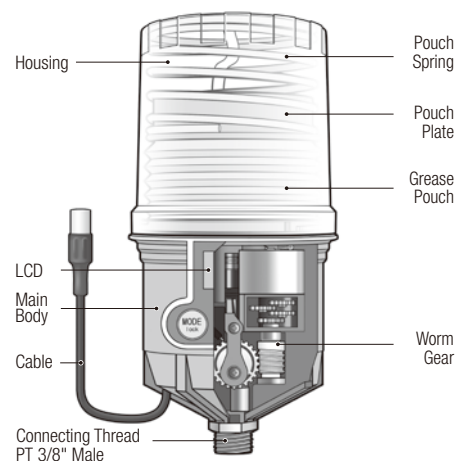
#### Remote Installation

Max. 10m (33ft) with O.D. Ø6 tube

#### Multi-Point Installation

Max. 6m (20ft) with O.D. Ø6 tube (Up to 8 lube points)

### Cross Section



#### Product Dimension

MS60, MS125 (MSP60, MSP125) : Ø91(3.60") x 181mm (7.13") (H)  
MS250 (MSP250) : Ø91(3.60") x 210mm (8.27") (H)  
MS500 (MSP500) : Ø92(3.62") x 260mm (10.23") (H)

### Applications



# MS & MSP Product Selection

The MS and MSP units both synchronize to machinery but are engineered differently in order to meet customer's specifications for their equipment. The MS unit turns On or Off through a relay box in accordance with the related equipment's power signal. The MSP unit connects to a power supply (VAC or VDC) that is connected to an electrical control panel.



## Pulsarlube MS

Uses a battery pack as its power source.

### MS+Relay Box+Service Pack

- \* Battery pack has to be replaced along with grease pouch.
- \* The Pulsarlube MS is not an externally powered unit.



## Pulsarlube MSP

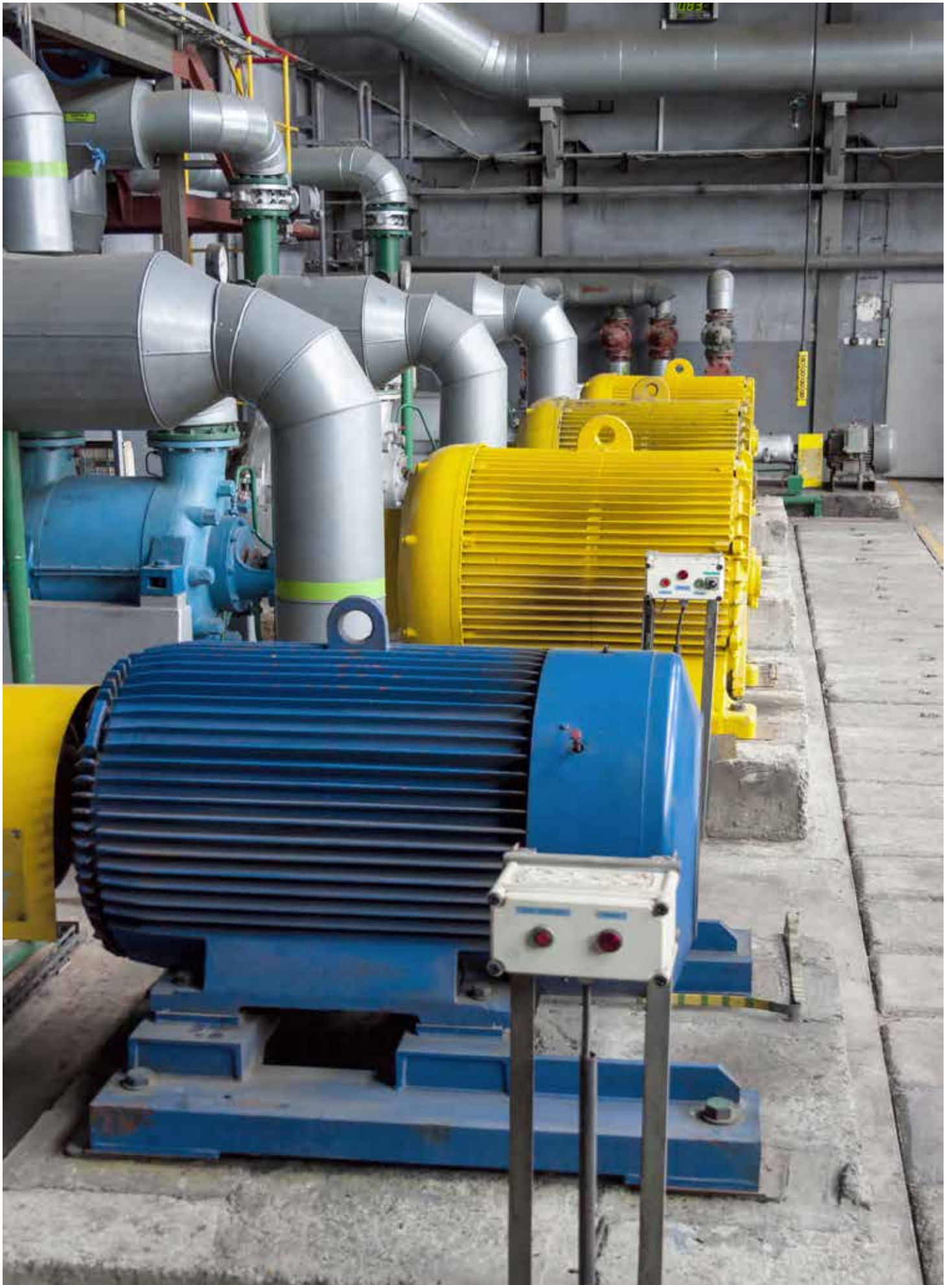
Uses external power as its power source.

### MSP+Power Supply (VAC or VDC)+Service Pack

- \* An initial battery pack is included in the MSP as a backup power source to store data when power is shut off. The battery pack in the MSP does not need to be replaced for up to 5 years.
- \* The Pulsarlube MSP is also available for oil (MSP-OL500).

## MS Relay / MSP Power Supply Specification

	MS	MSP	
	Relay	VAC	VDC
<b>Voltage Rate Input Range</b>	AC100~480V, 0.5W/50~60Hz	100~220V	12~24V
<b>Voltage Rate Output Range</b>	Signal (Open collector type)	5.0V, 2A	
<b>Power ON Indicator</b>	Red LED on Relay Box or Power Supply		
<b>Relay Box Dimensions</b>	85mm (D) × 49mm (W) × 32mm (H)		
<b>Wire Length</b>	From Lubricator : 90mm Input from Relay Box/Power Supply to lubricator : 1m (3.3ft) Output from Relay Box/Power Supply to equipment : 4m (13ft)		



# Pulsarlube Mi

## Synchronize Operation to Vibration

The Pulsarlube Mi operates only when machine operates by detecting vibration on the installed application.



\* For replacement kit information, please refer to Service Pack on Page 15.

### Features & Benefits

<b>Vibration Sensor</b>	Vibration sensor allows the unit to lubricate only when the application is operating
<b>Easy Installation</b>	No need for external electric wiring or other power cables
<b>Service Pack</b>	Substantial savings with the use of replaceable grease pouches and battery packs
<b>Simple &amp; Precise</b>	Simple to operate & dispenses precise amounts of lubricant reliably

### Specifications

#### Grease Pouch Capacity

60ml/125ml/250ml  
(capacity setting available)

#### Power Supply

DC 4.5V Battery Pack

#### Operating Pressure

30~60bar (435~870psi)

#### Operating Temperature

Standard Alkaline Battery :  
-15°C~60°C (5°F~140°F)  
Optional Lithium Battery :  
-40°C~60°C (-40°F~140°F)

#### Dispensing Periods

1~12 month

#### Remote Installation

Max. 1m (3.3ft) with O.D. Ø6 tube

#### Multi-Point Installation

Max. 1m (3.3ft) with O.D. Ø6 tube  
(Up to 2 lube points)

#### Product Certifications

CE

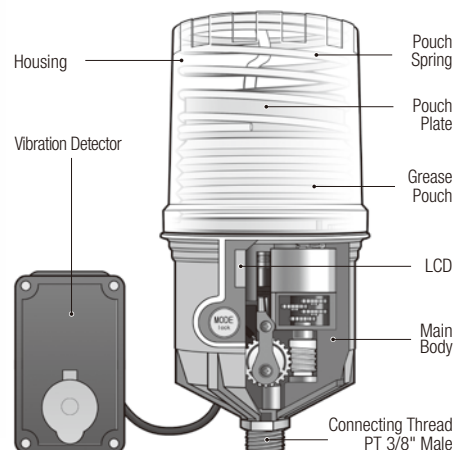
#### Vibration Detector

- Piezoelectric Cantilever-type Film Sensor
- Adjustable Sensitivity Range

#### Wire Length

- To Lubricator : 150mm (0.5ft)
- Sensor Cable : 1.2m (4ft)

### Cross Section



#### Product Dimension

Mi 60, Mi 125 : Ø91(3.60") x 181mm (7.13") (H)  
Mi 250 : Ø91(3.60") x 208mm (8.19") (H)

### Applications



Industry's first and only **Bluetooth-enabled** electromechanical lubricator controlled conveniently using the Pulsarlube mobile APP.



022-190186



KLT Co., Ltd.  
모델 (Model):  
BT60 CMIIT ID: 2019DJ0846  
BT120 CMIIT ID: 2019DJ0847  
BT240 CMIIT ID: 2019DJ1090

IP65

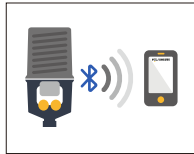


# Pulsarlube BT

## Enhanced Convenience

The Pulsarlube BT is the world's first and only Bluetooth-enabled electromechanical lubricator. Advanced connectivity adds great value to convenience & safety for the lubrication management & control program.

### Features & Benefits



Real-time pairing between mobile device and lubricator



Easily share information between mobile device and database server



Remotely monitor lubricator status in hazardous and inaccessible work areas via mobile App



Substantial savings with the use of replaceable grease pouches and battery packs



\* For replacement kit information, please refer to Service Pack on Page 15.

### Specifications

#### Grease Pouch Capacity

60ml/120ml/240ml (pre-set)

#### Power Supply

DC 4.5V Battery Pack (replaceable)  
Standard : Alkaline Battery  
Optional : Lithium Battery

#### Operating Pressure

30~60bar (435~870psi)

#### Operating Temperature

Standard Alkaline Battery :  
-15°C~60°C (5°F~140°F)  
Optional Lithium Battery :  
-40°C~60°C (-40°F~140°F)

#### Dispensing Periods

1~12 month

#### Remote Installation

Max. 6m (20ft) with O.D. Ø6 tube

#### Multi-Point Installation

Max. 3m (10ft) with O.D. Ø6 tube  
(Up to 8 lube points)

#### Detection Range

5~20m (16.4ft~65.6ft)  
depending on installation environment

#### Bluetooth Specification

Bluetooth 4.1 (class 2)

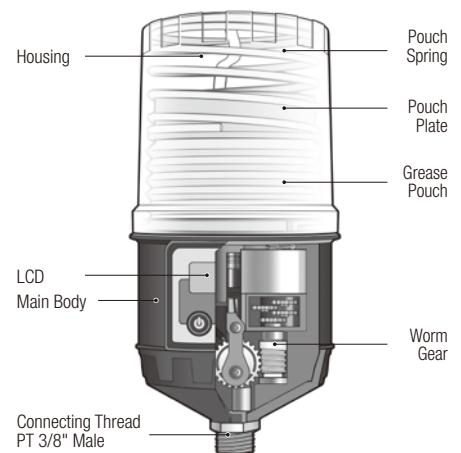
#### IP Code

IP65

#### Product Certifications

CE, KC, FCC, SIG, NCC, RCM, SRRC, NBTC, ICASA, J-MIC

### Cross Section



**Product Dimension**  
BT60, BT120 : Ø91(3.60") x 181mm (7.13") (H)  
BT240 : Ø91(3.60") x 208mm (8.19") (H)

### Applications



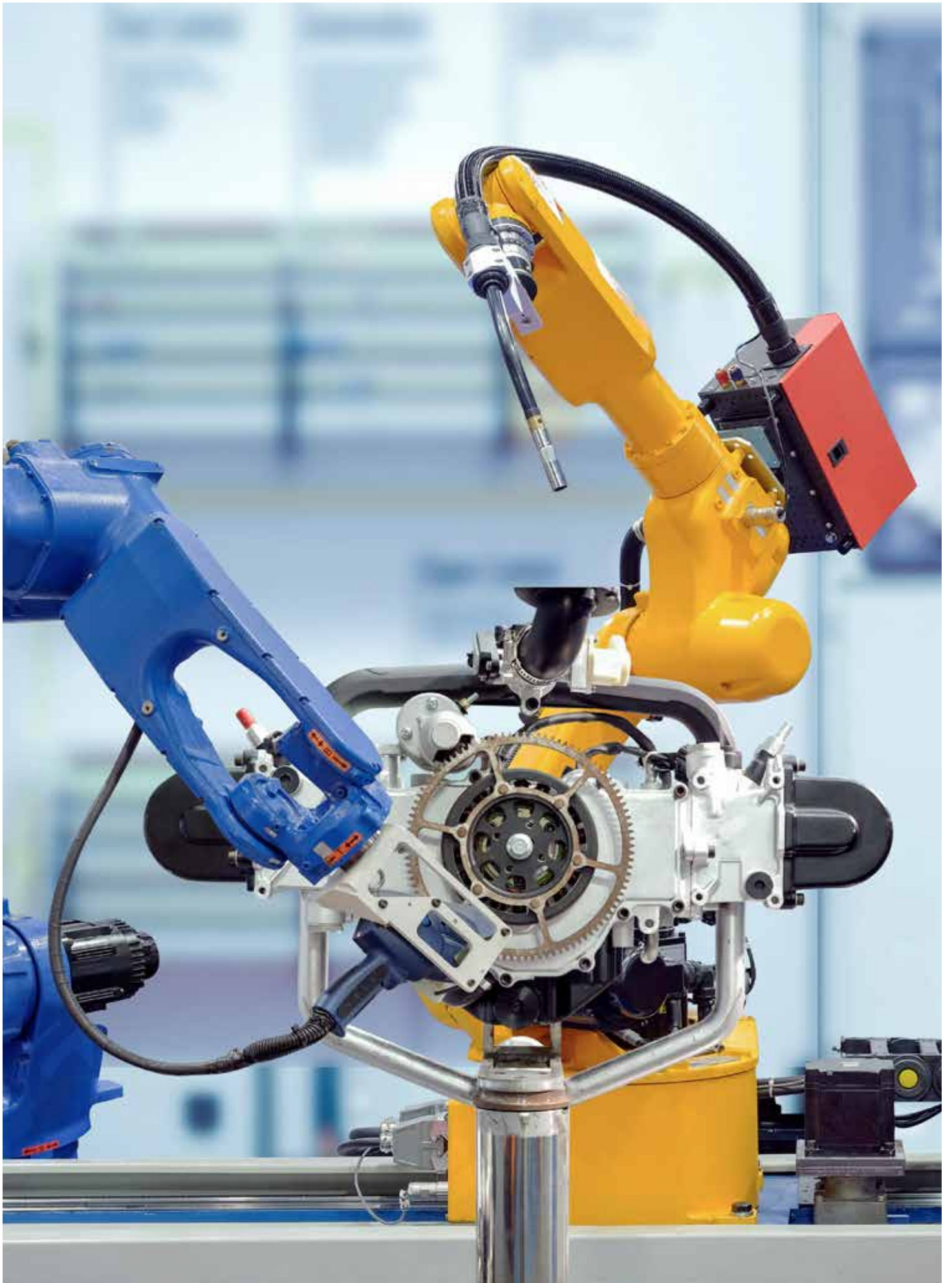
PETROCHEMICAL  
PLANTS

CLEAN  
ROOMS

HVAC  
SYSTEMS

ELECTRIC  
MOTORS

COOLING  
TOWERS



# Pulsarlube PLC

## PLC Controlled & High Performance

The Pulsarlube PLC is specially designed to be fully integrated with a PLC system and offered in two types; MONTH and INTERVAL type.



\* For replacement kit information, please refer to Service Pack on Page 15.

### Features & Benefits

<b>PLC Control</b>	Programmed to operate upon receiving a signal from the PLC
<b>Convenience</b>	Sends a signal to external alarm when encountering excessive backpressure or when dispensing cycle is completed
<b>Connectivity</b>	Both NPN and PNP connections are available
<b>Flexibility</b>	<b>MON type</b> dispenses at preset intervals and rates depending on the monthly setting selected <b>INT type</b> dispenses on command when a signal is received from the PLC, at the rate selected by the user

### Specifications

#### Grease Pouch Capacity

60ml/120ml/240ml/480ml (pre-set)

#### Power Supply

Power Supply : Externally Powered (DC 9V ~ 36V)

#### Operating Pressure

30~60bar (435~870psi)

#### Operating Temperature

-20°C~60°C (-4°F~140°F)

#### Dispensing Periods

MONTH type : 1~12 month

INTERVAL type :

1, 2, 3...6 Mode

#### Remote Installation

Max. 10m (33ft) with O.D. Ø6 tube

#### Multi-Point Installation

Max. 6m (20ft) with O.D. Ø6 tube (Up to 8 lube points)

#### Product Certifications

CE, KC

#### 1 Per Stroke (@20°C)

MONTH type :

0.34ml / Stroke (@20°C)

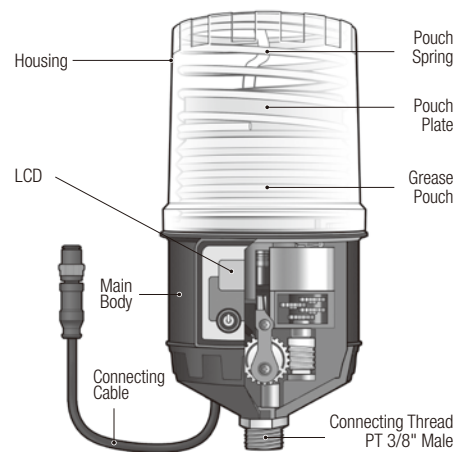
INTERVAL type :

0.34ml x Mode selected (@20°C)

#### Wire Length

- To Lubricator : 150mm (0.5ft)
- Extra connecting wires available for Purchase

### Cross Section



#### Product Dimension

PLC60, PLC125: Ø91(3.60") x 181mm (7.13") (H)

PLC240: Ø91(3.60") x 208mm (8.19") (H)

PLC480: Ø92(3.62") x 260mm (10.23") (H)

### Applications



# Pulsarlube OL500

## Compatible with a Wide Range of Oil Viscosity

The Pulsarlube OL500 is specifically designed to deliver a fresh, consistent, and precise amount of oil to all of the vital parts of your rotating equipment.



### Specifications

#### Oil Reservoir Capacity

500ml (refillable)

#### Power Supply

DC 4.5V Battery Pack

#### Operating Pressure

10bar (145psi)  
(depends on oil viscosity)

#### Operating Temperature

Standard Alkaline Battery :  
-15°C~60°C (5°F~140°F)

#### Dispensing Periods

1, 2, 4, 6, 12, 18, 24 month & H (15 days)

#### Remote Installation

Max. 6m (20ft) with O.D. Ø4 tube

#### Multi-Point Installation

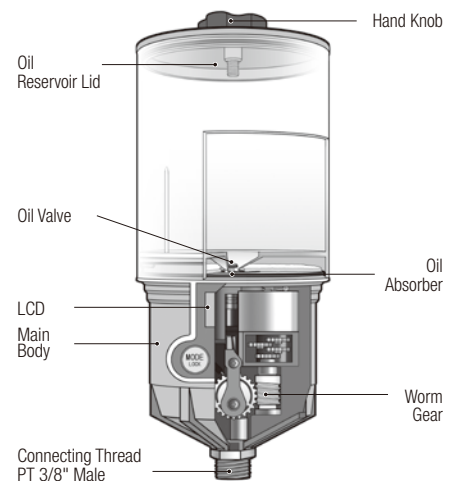
Max. 3m (10ft) with O.D. Ø4 tube  
(Up to 4 tube points)

#### Oil Viscosity Range

10~10,000 cSt@40°C

\* Special instructions available on user manual for low viscosity oils (10~100cSt@40C)

### Cross Section



#### Product Dimension

OL500 : Ø94 (3.70") x 229 mm (9.02") (H)

### Features & Benefits

<b>Cost Savings</b>	Refillable oil reservoir and multi-point lubrication capability
<b>Adaptability</b>	Able to handle a wide range of oil viscosity
<b>LCD</b>	Easy to program with built-in LCD and simple button controls
<b>Easy to Refill</b>	Refillable on-site

### Applications



ESCALATORS CHAINS

# Pulsarlube EO

## Highly Cost Effective Gas Type Oiler

The Pulsarlube EO is a low-cost oil lubrication solution which utilizes a non-return valve (NRV) to allow reliable lubrication while minimizing oil leaks.



### Features & Benefits

<b>NRV</b>	Specially designed non-return valve (NRV) allows the unit to be installed in any position minimizing oil leak
<b>Compact Design</b>	Compact size is convenient for use in confined spaces
<b>Durability</b>	Engineered to withstand high vibration
<b>Eco-Friendly</b>	The components of Pulsarlube EO can be disposed of and recycled separately conforming to local regulations

### Specifications

#### Oil Reservoir Capacity

60ml/120ml/240ml  
(disposable)

#### Operating Method

Electrochemical reaction  
(Nitrogen gas)

#### Operating Pressure

Max. 5bar (73psi)

#### Operating Temperature

-20°C~55°C (-4°F~131°F)

#### Dispensing Periods

1, 3, 6, 9, 12 month

#### Remote Installation

Max. 3m (10ft) with O.D. Ø4 tube

#### Multi-Point Installation

N/A

#### Product Certifications

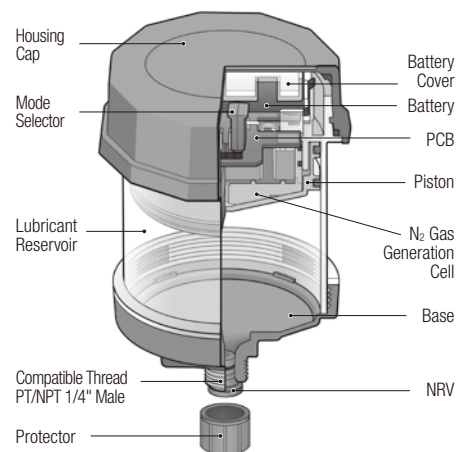
ATEX, UL, IECEx, KCs, CE, MSHA

#### Oil Viscosity Range

10~10,000 cSt@40°C

\* Special instructions available on user manual for low viscosity oils (10~100cSt@40C)

### Cross Section



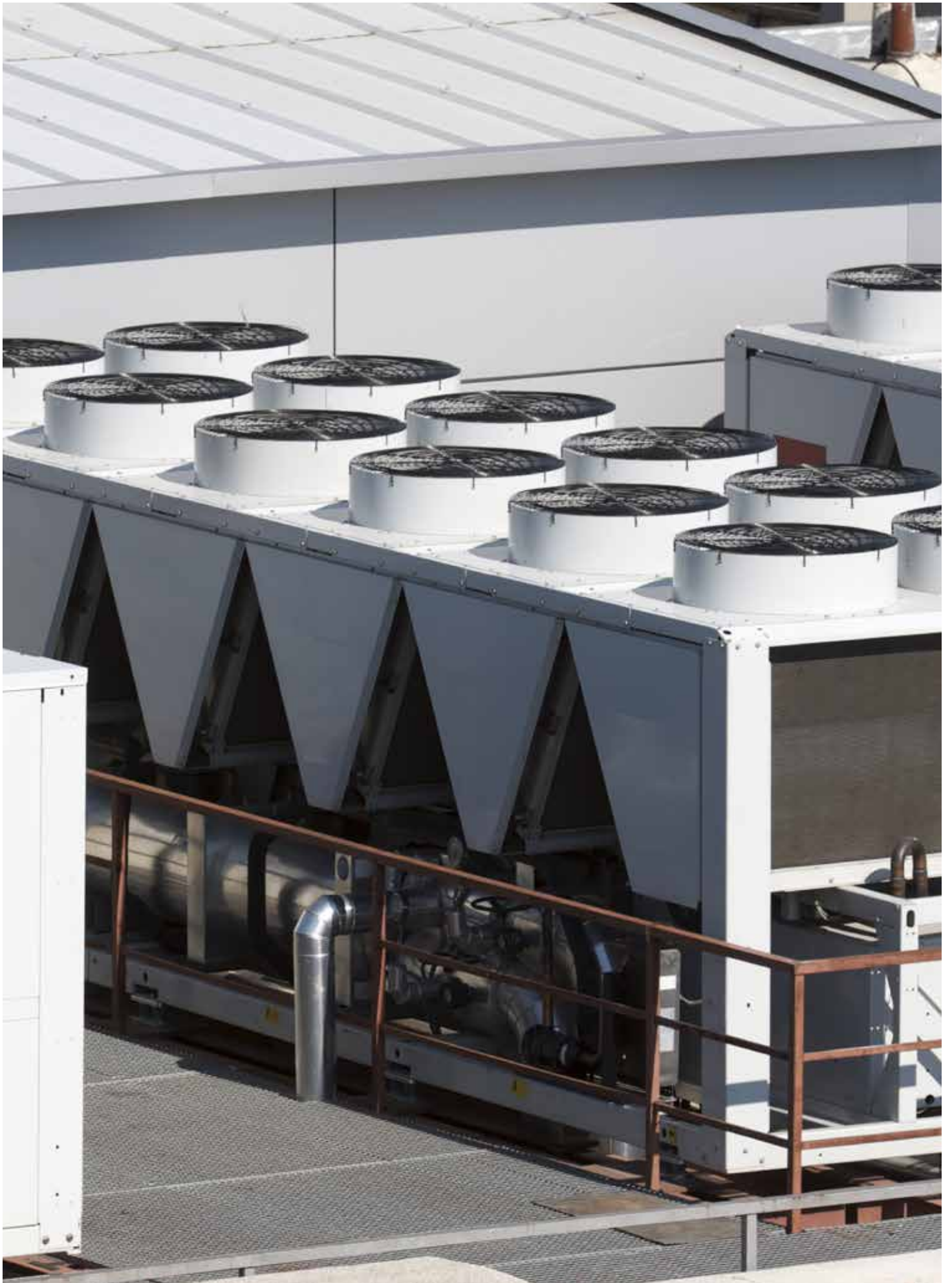
### Product Dimension

EO60 : Ø77(3.03") x 91mm (3.58") (H)  
EO120 : Ø77(3.03") x 111mm (4.37") (H)  
EO240 : Ø77(3.03") x 156mm (6.14") (H)

### Applications



ESCALATORS WIRE ROPES CHAINS



# Pulsarlube S

## Unique & Ingenious Design

The Pulsarlube S is an advanced spring type lubricator that operates with the spring at the bottom and an upward piston movement, which dramatically reduces the effects of oil separation that have plagued traditional spring type lubricators.



### Specifications

#### Grease Pouch Capacity

100ml (refillable)

#### Operating Method

Spring

#### Operating Pressure

N/A

#### Operating Temperature

-23°C~-121°C (-9°F~-250°F)

#### Dispensing Periods

5 Dial Settings

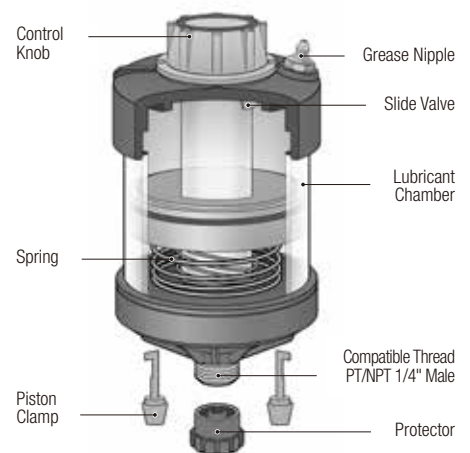
#### Remote Installation

N/A

#### Multi-Point Installation

N/A

### Cross Section



#### Product Dimension

S100 : 067 (2.64") x 129mm (5.08") (H)

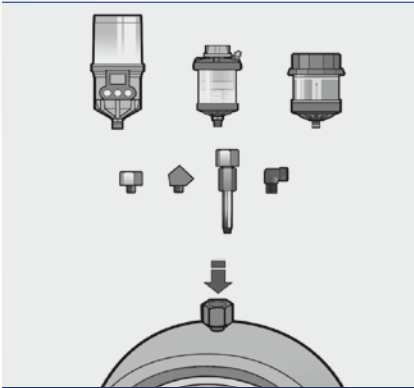
### Features & Benefits

<b>Design</b>	The upward piston movement reduces oil separation and the possibility of grease hardening
<b>Control Knob</b>	Grease dispensing rate can be easily controlled by using the control knob
<b>Reuse</b>	Easy to refill grease on-site using grease nipple
<b>Pre-Filled</b>	Available pre-filled due to strategically placed piston clamps

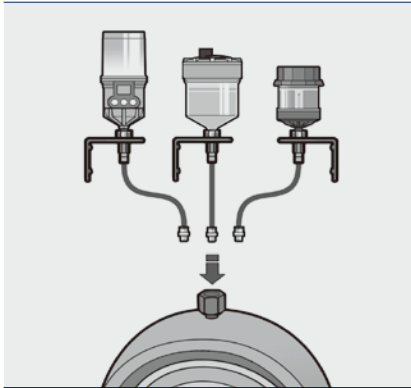
### Applications



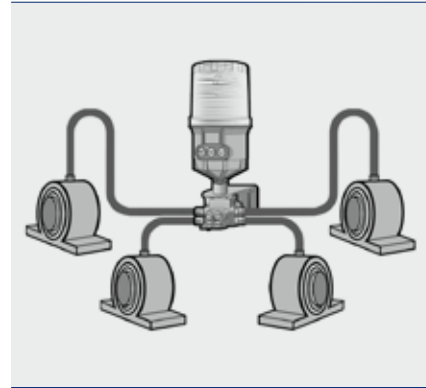
## Pulsarlube Installation Options



**Direct Mount**



**Single Point Remote Installation**



**Multi-Point Installation**

### Direct Mount

Prior to installing your lubricator, please refer to our full accessories list on the website to order necessary parts for your application.

Reducer	Socket	45° Elbow	90° Elbow	Pipe
				

### Single Remote & Multi-Point Installation

Frequently used installation parts that are necessary to install Pulsarlube lubricators/oilers are packaged in a single assembly kit for your convenience. The kits are designed to meet all relevant standards. Please refer to the complete assembly kits chart below to order the right kit for your application. If further assistance is needed, please contact your local supplier.

Installation Kit Type		Gas Type Lubricator		Mechanical Lubricator
		E	V	M, EXP, EXPL, MS, MSP, BT, Mi, PLC
Single Point Kit	Single Point	2000RC-1	1000RC-1	1250RC-1
Multi-Point Kit	2 Point	-	-	1250MD-2
	3 Point	-	-	1250MD-3
	4 Point	-	-	1250MD-4
	5 Point	-	-	1250MD-5
	6 Point	-	-	1250MD-6
	7 Point	-	-	1250MD-7
	8 Point	-	-	1250MD-8

### Pulsarlube Applications

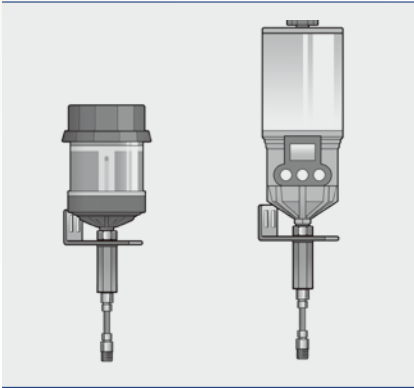


## Installation Kits & Accessories for Grease Lubrication

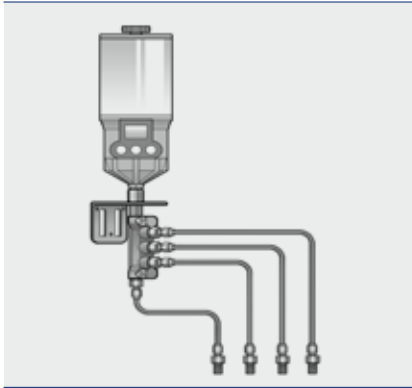


No.	Part No.	Specifications	Single Point			Multi-Point						
			2000 RC-1	1000 RC-1	1250 RC-1	1250 MD-2	1250 MD-3	1250 MD-4	1250 MD-5	1250 MD-6	1250 MD-7	1250 MD-8
1	A002	Reducer, 3/8"F x 1/8"M Adaptor (Brass)		●	●	●	●	●	●	●	●	●
2	A005	Reducer, 1/4"F x 1/8"M Adaptor (Brass)	●									
3	B002	Mounting Bracket, "L" Shape	●	●	●	●	●	●	●	●	●	●
4	B051	Self Drilling Screw, #8 x 20	●	●	●	●	●	●	●	●	●	●
5	HU-2RS	HU-2RS, Grease Type, 2 Ports				●						
	HU-3RS	HU-3RS, Grease Type, 3 Ports					●					
	HU-4RS	HU-4RS, Grease Type, 4 Ports						●				
	HU-5RS	HU-5RS, Grease Type, 5 Ports							●			
6	HU-6RS	HU-6RS, Grease Type, 6 Ports							●			
	HU-7RS	HU-7RS, Grease Type, 7 Ports								●		
	HU-8RS	HU-8RS, Grease Type, 8 Ports									●	
6	B057	Washer	●	●	●							
7	B058	Tooth Washer				●	●	●	●	●	●	●
8	A012	Socket, 1/8"F x 1/8"F Adaptor (Brass)	●	●	●							
9	A239	Tube Fitting, Push-In Type, PC8-PT1/8"M	●	●								
10	A240	Tube Fitting, Push-In Type, PC6-PT1/8"M			●	●	●	●	●	●	●	●
11	A214-1	Distribution Tubing, O.D. 1/4"(6mm) Nylon Tubing, 10ft Pre-filled with (Grease Type)			●	●	●	●	●	●	●	●
12	A212-1	Distribution Tubing, O.D. 5/16"(8mm) Urethan Tubing, 3ft Pre-filled with (Grease Type)	●	●								
13	A243	Thread Converter, PT1/8"F X NPT1/8"M (Brass) (USA only)	●	●	●	●	●	●	●	●	●	●

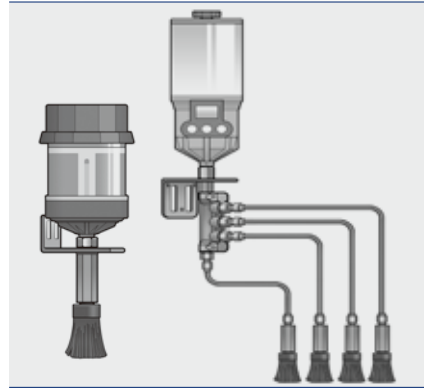
## Pulsarlube Oiler Installation Options



Single Point Installation for Oilers



Multi-Point Installation for Oilers



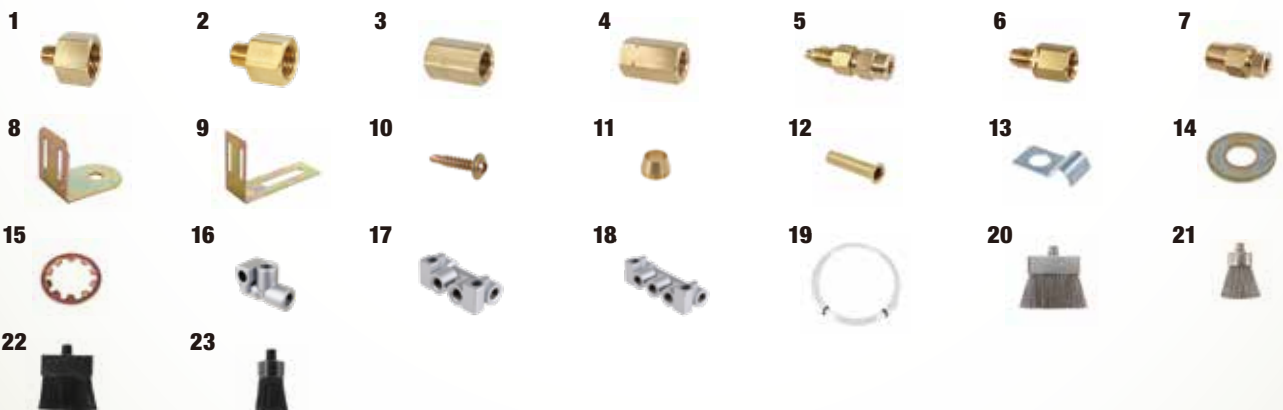
Brush Kits for Oilers

Installation Kit Type		Gas Type Oiler	Mechanical Oiler
		E0	OL500
Single Point Kit	Single Point	C035	1250R0-1
	Multi-Point Kit		
	2 Point	-	1250R0-2
	3 Point	-	1250R0-3
	4 Point	-	1250R0-4
Brush Kit	Flat Nylon Brush	C036	C030
	Round Nylon Brush	C037	C031
	Flat Steel Brush	C038	C032
	Round Steel Brush	C039	C033

## Application Solutions



## Installation Kits & Accessories for Oil Lubrication



## Installation Kits & Accessories for Oil Lubrication - Continued

No.	Part No.	Specifications	Single Point		Multi-Point		
			C035	1250RO-1	1250RO-2	1250RO-3	1250RO-4
1	A002	Reducer, 3/8"F x 1/8"M Adaptor (Brass)		●	●	●	●
2	A005	Reducer, 1/4"F x 1/8"M Adaptor (Brass)	●				
3	A012	Socket, 1/8"F x 1/8"F Adaptor	●	●			
5	C004-1	Resistance Valve, #1 Distributor Spray (one-touch type)			●	●	●
6	C006	Reducer, PT 1/8"F x M8 x 1P			●	●	●
7	C007	Tube Fitting, Dia. 4mm x PT1/8"M	●	●	●	●	●
8	B002	Mounting Bracket, "L" Shape	●	●	●	●	●
10	B051	Self Drilling Screw, #8 x 20	●	●	●	●	●
11	C009	Sleeve Ring, Dia. 4mm	●	●	●	●	●
12	C011	Insert, Dia. 4mm x 2.5mm	●	●	●	●	●
13	C010	Tube Clamp, Dia. 4mm x 1R	●	●	●	●	●
14	B057	Washer	●	●	●	●	●
16	C003-1	Distributor, 3 (1P) M8 x 1P			●		
17	C003-2	Distributor, 4 (2P) M8 x 1P				●	
18	C003-3	Distributor, 5 (3P) M8 x 1P					●
19	C021-1 ~ C021-4	O.D. 4mm Nylon Tubing (Clear), 10ft (3m) ~ 40ft (12m)	●	●	●	●	●

No.	Part No.	Specifications	EO Brush Kit				OL Brush Kit			
			C036	C037	C038	C039	C030	C031	C032	C033
1	A002	Reducer, 3/8"F x 1/8"M Adaptor (Brass)					●	●	●	●
2	A005	Reducer, 1/4"F x 1/8"M Adaptor (Brass)	●	●	●	●				
4	C012	Socket, PT1/8"F x NPT1/8"F	●	●	●	●	●	●	●	●
9	B003	Oil Brush Bracket, "L"Shape	●	●	●	●	●	●	●	●
10	B051	Self Drilling Screw, #8 x 20	●	●	●	●	●	●	●	●
14	B057	Washer	●	●	●	●	●	●	●	●
15	B058	Tooth Washer	●	●	●	●	●	●	●	●
20	C013	Oil Brush, 2" Flat Stainless Steel, NPT1/8"M			●				●	
21	C014	Oil Brush, 1" Round Stainless Steel, NPT1/8"M				●				●
22	C001	Oil Brush, 2" Flat Nylon, NPT1/8"M	●				●			
23	C002	Oil Brush, 1" Round Nylon, NPT1/8"M		●				●		

### Pulsarlube Standard Grease

Grease Code	Region	Application	Base Oil	Temperature	NLGI #	Thickener	Color
PL1	●	Multipurpose	Mineral	-20°C~150°C	1.5	Lithium Complex	Yellow
PL2	● ●	Heavy Duty	Mineral	-15°C~170°C	1	Aluminum Complex	Black
	●			-30°C~180°C	1	Calcium Sulfonate	Grey
PL3	●	High Speed	Mineral	-30°C~130°C	1.5	Lithium Complex	Yellowish Brown
PL4	●	Food Grade	Synthetic	-40°C~200°C	2	Calcium Sulfonate Complex	White
	●		Synthetic	-40°C~200°C	2	Calcium Sulfonate Complex	Off-White
	●		Mineral	-20°C~120°C	2	Aluminum Complex	White
PL5	● ●	High Temperature	Mineral	-15°C~160°C	1	Polyurea	Beige
	●		Synthetic	-40°C~150°C	2	Lithium Complex	Red
PL6	●	Multipurpose with MoS <sub>2</sub>	Mineral	-20°C~140°C	2	Lithium Complex	Grey Black
	● ●		Synthetic	-40°C~170°C	1	Lithium Complex	Grey
PL7	●	Low Temperature	Synthetic	-40°C~170°C	1	Lithium Complex	Gold
PL8	●	Biodegradable	Synthetic	-30°C~130°C	2	Lithium	Dark Yellow
PL10	●	Motor Bearing	Mineral	-20°C~160°C	2	Polyurea	Blue
	●	Motor Bearing	Mineral+Synthetic	-25°C~150°C	2	Lithium	Beige

● Pulsarlube USA (North and South America) ● Pulsarlube GmbH (Europe) ● Pulsarlube Asia Pacific (Asia, Oceania, Africa) ● Worldwide  
 Pulsarlube standard grease specifications may change due to supplier's demand. For non-standard grease, please contact your supplier for availability.

### Grease Thickener Compatibility Chart

	Aluminum Complex	Barium Complex	Calcium Stearate	Calcium 12 Hydroxy	Calcium Complex	Calcium Sulfonate	Clay Non-soap	Lithium Stearate	Lithium 12 Hydroxy	Lithium Complex	Polyurea Conventional	Polyurea Shear Stable
Aluminum Complex		x	x	●	x	▲	x	x	x	●	x	●
Barium Complex	x		x	●	x	●	x	x	x	x	x	▲
Calcium Stearate	x	x		●	x	●	●	●	▲	●	x	●
Calcium 12 Hydroxy	●	●	●		▲	▲	●	●	●	●	x	●
Calcium Complex	x	x	x	▲		x	x	x	x	●	●	●
Calcium Sulfonate	▲	●	●	▲	x		x	▲	▲	●	x	●
Clay Non-soap	x	x	●	●	x	x		x	x	x	x	▲
Lithium Stearate	x	x	●	●	x	▲	x		●	●	x	●
Lithium 12 Hydroxy	x	x	▲	●	x	▲	x	●		●	x	●
Lithium Complex	●	x	●	●	●	●	x	●	●		x	●
Polyurea Conventional	x	x	x	x	●	x	x	x	x	x		●
Polyurea Shear Stable	●	▲	●	●	●	●	▲	●	●	●	●	

▲ Test required ● Compatible X Incompatible

# Pulsarlube Installation Guide

● Recommended △ To be decided after inspection

Installation Type	Installation Conditions & Checkpoints	Lubricator Type											
		Spring	Electrochemical			Electromechanical		Electromechanical - Synchronizing		Electromechanical - Remote Management		Oiler	
		S	E	V	M	EXP/EXPL	MS&MSP	Mi	BT	PLC	OL500	EO	
<b>Before Installation</b>	Select a proper location convenient for operation / replacement	●	●	●	●	●	●	●	●	●	●	●	●
	Check the thread size (1/4", 3/8") of the grease inlet	●	●	●	●	●	●	●	●	●	●	●	●
<b>Direct Installation</b>	Heavy dust or particle contamination	●	●	●	●	●	●	●	●	●	●	●	●
	Low backpressure	●	●	●	●	●	●	●	●	●	●	●	●
	High vibration (A dampener should be applied for high vibration conditions)	●	●	●	●	●	●	●	●	●	●	●	●
	Moisture and water (Check the IP rating on each model)	●	●	●	△	●	△	△	●	●	△	●	●
	High backpressure				●	●	●	●	●	●	●	●	●
	Confined areas	●	●										●
<b>Remote Installation</b>	High temperature areas (Maximum ambient temperatures of 55°C or under)		△		●	●	●	●	●	●	●	●	△
	High vibration		●		●	●	●	●	●	●	●	●	●
	Confined areas				●	●	●	●	●	●	●	●	
	Long distance from lube point (over 1m)				●	●	●	●	●	●	●	●	
<b>Multi-Point Installation</b>	Short distance from lube point				●	●	●	●	●	●	●	●	
	Multiple lube points gathered in limited spaces				●	●	●	●	●	●	●	●	
<b>Machine Synchronized Application</b>	Lubrication must be applied whenever machine operates							●	●		●		
	Machine operates with extended downtimes							●	●		●		
	HVAC & other machines that may be controlled by temperature changes							●	●		●		
	Machine is a fire risk hazard due to overheating/over-lubrication							●	●		●		
<b>Check Points</b>	<ul style="list-style-type: none"> <li>☑ Read the user manuals prior to installation and follow instructions carefully for appropriate installation of Pulsarlube products.</li> <li>☑ Please check compatibility between the grease previously used in machinery and the grease contained in the Pulsarlube lubricator and tubing.</li> <li>☑ Please check that fitting connections are tight and that the bearing passageway is clear before installation.</li> <li>☑ Units installed with 45° &amp; 90° elbow adapters in confined areas should be handled and replaced with care.</li> <li>☑ Do not install units in areas where they may fall and cause injuries.</li> <li>☑ Take tube length, tube I.D., and backpressure at the lube point into consideration for remote installation.</li> <li>☑ For optimal results in multi-point installation, please consider the following :               <ol style="list-style-type: none"> <li>① Minimize operating pressure (backpressure from tubing + backpressure from divider block + backpressure from bearing)</li> <li>② Use lower NLGI grade grease (NLGI#1 grease is recommended).</li> <li>③ Keep lube points (maximum up to 8 points) and tubing length to a minimum.</li> <li>④ Regular check-ups of dispensing conditions are required if using a divider block or oil distributor.</li> </ol> </li> </ul>												

## Pulsarlube Dispensing Recommendations

Below are some general guidelines for bearing lubrication requirements. Testing is recommended for specific applications. Please contact your local distributor should you need any assistance in setting proper dispensing rates.

### Dispensing Cycle Chart

(0.34ml / Cycle)

Mode/ Month \ ml	60ml		120ml / 125ml		240ml / 250ml		480ml / 500ml	
	Hours	Cycles/Day	Hours	Cycles/Day	Hours	Cycles/Day	Hours	Cycles/Day
1/2	-	-	1 hours	24.00	30 minutes	48.00	15 minutes	96.00
1	4 hours	6.00	2 hours	12.00	1 hours	24.00	30 minutes	48.00
2	8 hours	3.00	4 hours	6.00	2 hours	12.00	1.0 hours	24.00
3	12 hours	2.00	6 hours	4.00	3 hours	8.00	1.5 hours	16.00
4	16 hours	1.50	8 hours	3.00	4 hours	6.00	2.0 hours	12.00
5	20 hours	1.20	10 hours	2.40	5 hours	4.80	2.5 hours	9.60
6	24 hours	1.00	12 hours	2.00	6 hours	4.00	3.0 hours	8.00
7	28 hours	0.86	14 hours	1.71	7 hours	3.43	3.5 hours	6.86
8	32 hours	0.75	16 hours	1.50	8 hours	3.00	4.0 hours	6.00
9	36 hours	0.67	18 hours	1.33	9 hours	2.67	4.5 hours	5.33
10	40 hours	0.60	20 hours	1.20	10 hours	2.40	5.0 hours	4.80
11	44 hours	0.55	22 hours	1.09	11 hours	2.18	5.5 hours	4.36
12	48 hours	0.50	24 hours	1.00	12 hours	2.00	6.0 hours	4.00
18	-	-	-	-	-	-	9.0 hours	2.66
24	-	-	-	-	-	-	12.0 hours	2.00
<b>Total # Cycle</b>	180 Cycles		360 Cycles		720 Cycles		1440 Cycles	

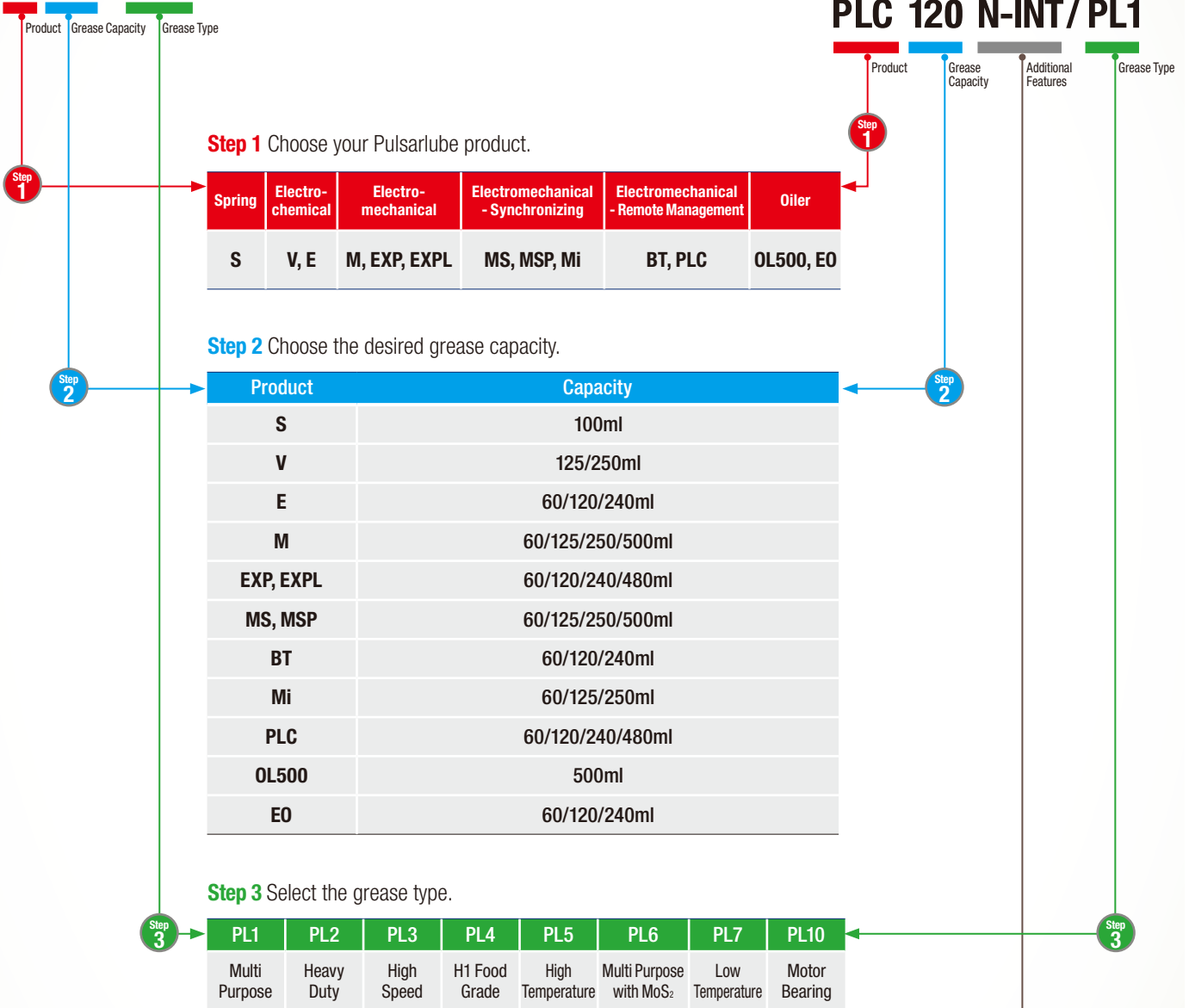
### Dispensing Periods

Product \ ml	60ml	120ml / 125ml	240ml / 250ml	480ml / 500ml
M	1~12 Month	1, 2, 3, 6, 12 Month & H (15 days)		1, 2, 4, 6, 12, 18, 24 Month & H (15 days)
MS & MSP				
OL500	-			1, 2, 4, 6, 12, 18, 24 Month & H (15 days)
EXP / EXPL	1~12 Month	1, 2, 3, 6, 9, 12 Month		
Mi	1~12 Month			
BT				
PLC (Month)				
PLC (Interval)				

Please follow the steps below when ordering Pulsarlube products. OEM filling is available upon request under special terms and conditions. Please contact your local distributor or Pulsarlube regional sales office for detail information. Certain products may not be available in specific regions.

EX) M125 / PL2

EX) MSP 125-VDC / PL2  
PLC 120 N-INT / PL1



Additional Features for certain products.

MSP Power Supply	
VAC (AC-DC Adapter)	VDC (DC-DC Converter)

PLC	
1) N : NPN Sensor Type	1) INT : Interval Control Type
2) P : PNP Sensor Type	2) MON : Month Control Type

\* When ordering the Pulsarlube PLC, please select your PLC sensor type and the signal control type.



**Pulsarlube USA, Inc.**

1480 Howard Street, Elk Grove Village, IL 60007, USA  
Tel: +1(847) 593-5300 / Fax: +1(847) 593-5303  
[www.pulsarlube.com](http://www.pulsarlube.com) / [sales@pulsarlube.com](mailto:sales@pulsarlube.com)

**Pulsarlube Asia Pacific**

Daerung Posttower 6th #814, 298, Beotkot-ro, Geumcheon-gu, Seoul, Korea  
Tel : +82(2)2135-3788 / Fax : +82(2) 2083-8485  
[www.pulsarlube.co.kr](http://www.pulsarlube.co.kr) / [sales.asia@pulsarlube.com](mailto:sales.asia@pulsarlube.com)

**Pulsarlube GmbH**

Silostrasses 31b, 65929 Frankfurt am Main, Germany  
Tel: +49(0) 69-3399-7501 / Fax: +49(0) 69-3399-7503  
[www.pulsarlube.de](http://www.pulsarlube.de) / [info@pulsarlube.de](mailto:info@pulsarlube.de)

**Pulsarlube China**

Room 215, No.16, Lane 399, Xinlong Road, Minhang District, Shanghai, China  
Tel: +86 21-6221-8211 / Fax : +86 21-6221-9020  
[www.pulsarlube-cn.com](http://www.pulsarlube-cn.com) / [sales.china@pulsarlube.com](mailto:sales.china@pulsarlube.com)