

AUTOMATIC LUBRICATION SYSTEM



THE ULTIMATE LUBE MACHINE

Simple Reliable Optimum

INTRODUCTION





A quality lubricant is important to ensure the maximum availability of the machine or vehicle. You can prevent a great amount of wear and tear and unwanted breakdowns by regularly lubricating the right amount of lubricant (grease).

Proper lubrication will prevent repair cost and unnecessary breakdowns. Even though this is done manually it will cost a lot of money and equipment downtime and importantly waste of human energy...

Abrasive and corrosive elements like sand, water, mud ,earth minerals, chips and burrs and grits severely damage the operational life of the expensive bearings and linkages. Component failure could be disastrous in a continuous production cycle.

The answer for the above is LUBERR ALS (Automatic Lubrication System)

With LUBERR ALS you can be rest assured that under all operating conditions the right amount of grease will be delivered to the required bearing at the right time intervals, so that the machine or vehicle always has the maximum utilization without downtime, breakdowns and also provides maximum protection against the abrasives and pollutants.

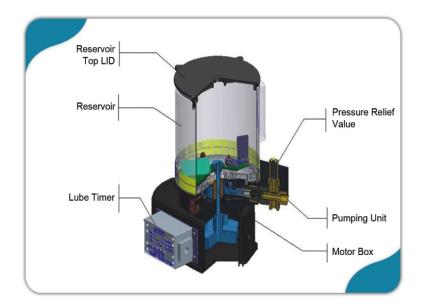




CONSTRUCTION OF LUBERR

LUBERR is specifically designed for the automotives, on road and off road heavy vehicles, rail transit systems, wind mills, special purpose machines, plastic processing machines and to cope up with most demanding application. Its power and rugged construction gives you the reassurance that unlike a manual lubrication vital bearings will not be skipped. And this is because the LUBERR ensures right amount of grease at right intervals.

LUBERR is a DC operated piston pump with the pumping element. It runs from a camshaft connected to a motor. It



can be fitted with up to 3 pumping elements which are available with a PRV (pressure relief valve).

The main body of the pump is made from high performance robust material and is compact in size designed to withstand tough environments.

The grease version of the LUBERR includes a stirrer device with a reservoir wiper that help to eliminate air present in the grease and facilitate pumping even at lower temperatures.

The DC geared motor drive arrangement can be controlled thru the built in control system. There are 2 operating modes for the Lube Timer version:

- 1. TIME BASED: Lube cycle and Pause cycle are controlled using the built in timer.
- 2. FEED BACK BASED: Lube cycle is controlled by setting the number of cycles signalled by Distributor Indication sensor. The pause cycle is set using the built in timer.

LUBERR has been designed with a configurable wiring and connector system. The connectors and wiring harness are optional.





GENERAL OPERATIONAL INFORMATION

The LUBERR ALS are designed to provide oil or grease for lube friction points on industrial and mobile equipment.



LUBERR ALS considerably reduces the cost of maintaining machinery on which they are installed due to better operating conditions as a result of proper lubrication. LUBERR ALS eliminates machinery downtime caused by poor lubrication as well as prolonging the life of the machinery in general.

Additionally, an automatic lubrication system manages to lubricate inaccessible lubrication points at frequent intervals that would otherwise be hard to access under normal conditions. The diagram shows a Layout of a simple automatic lubrication system.

The main components are:

A - Electric LUBERR pump with Reservoir

B - Primary lubrication line

C - Progressive Distributor

D – Secondary lines delivers grease to lube point

E - Lube Timer

When the pump is activated, it pumps grease into the primary line. Then, the distributor distributes the lubricant progressively to number of secondary lines. These secondary lines are then piped to the lubrication greasing point. The configuration of the distributor allows for different ratio of grease to the secondary line to be achieved.

LUBERR has been designed to provide the pumping solution for such systems used in industrial and mobile applications for greases up to NLGI 2 consistency and oils with minimum 46cSt.

The pump should be therefore limited to this purpose. The user should be aware that certain lubricants can cause problem to the pump and therefore care must be taken to select suitable lubricant that falls within the above range.





LUBERR SPECIFICATONS

GENERAL TECHNICAL SPECIFICATION			
Operating Voltage	12V DC	24V DC	
Current (nominal)	1A	0.5A	
Current (peak)	2.5A	2A	
Number of outlets/pumping elements	Max upto 3nos	Max upto 3nos	
Maximum Working pressure	250 bar (3600 psi)	250 bar (3600 psi)	
Reservoir Capacity	2kgs / 4kgs / 6kgs	2kgs / 4kgs / 6kgs	
Max Grease capability	NLGI 2	NLGI 2	
Min. oil viscosity	46cSt	46cSt	
Operating temperature	-25°C to +80°C	-25°C to +80°C	
Humidity	90%	90%	
Noise	< 70db (A)	< 70db (A)	
CONTRO	L UNIT		
Operating Voltage	12VDC ±20%	12VDC ±20%	
	24VDC ±20%	24VDC ±20%	
Maximum Output load capability	3A	3A	
Short circuit & Overload protection	4A typical / 10A m	4A typical / 10A max.	
Hardware protection	Spike voltage protection	Overload protection on motor and lamp Spike voltage protection Inverted Polarity protection	
Memory Life	Unlimited (no battery	Unlimited (no battery requirement)	





LUBERR PUMPING UNIT		
Pumping Unit Output	0.20 CC / Stroke	
Outlet thread	1/4" BSP	
Optional outlet thread port	M10 x1p (F)	
Maximum Working pressure	250 bar (3600 psi)	
Integrated By-pass pressure relief valve	Set at 200 bar ± 20 bar	







BENEFITS OF LUBERR ALS

Automatic greasing is very important for machines and vehicles to continue to perform reliably even under severe operating conditions.

LESS WEAR...

Grease reduces the wear of the moving parts and provides an efficient barrier against the dust ,dirt and corrosion.

GREASING DURING OPERATION...

As compared to manual lubrication, In a LUBERR system small qty of periodic lubrication happens even during the equipment is in operation.

LOWER COSTS...

Luberr provides the required qty of grease at required interval resulting in huge savings of over-greasing done due to manual greasing.

LOWER MAINTANACE COST...

Reduced wear and tear provides longer life of the bushes which directly brings down the maintenance cost.

INCREASED PRODUCTIVITY...

Use of luberr results in fewer repairs and extends maintenance intervals which improves and increases productivity.





Properly Lubricated bush condition





Worn out bush condition

LUBERR KEEPS YOUR EQUIPMENT AT MAXIMUM UTILISATION



