



Lube Control Pty Ltd

Providing lubrication solutions!

www.lubecontrol.com.au
sales@lubecontrol.com.au

Australia wide

1300 917 946

+61 8 8298 5563



ILC MAX – High Pressure Progressive Auto Lube System.
Suitable for oil and grease up to NLGI 2

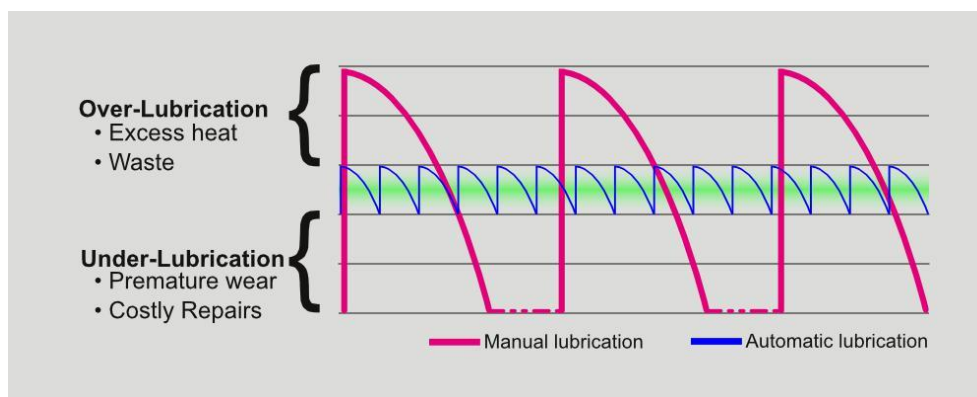
ILC AND LUBE CONTROL

Since 1975, ILC has developed lubrication systems for applications that are installed by major manufacturers. The systems range from simple manual systems to fully automatic lubrication system to lubricate small to large sized machinery. In July 2019 Lube Control Pty Ltd became the Australian distributor for ILC lubrication Systems.

ILC MAX – PROGRESSIVE LUBRICATION SYSTEM

The progressive lubrication system allows oil or grease (up to NLGI 2) to be distributed accurately to lubricate the friction points of a machine. The ILC pump exerts 250 bar pressure and the progressive divider blocks of up to 24 outlets guarantee a correct pre-determined amount of lubricant at each point. The system is easy to control and can be monitored by an electrical switch on the main divider.

To achieve optimum reliability any machine will need the right lubricant, the right quantity, the right frequency at the right place. The ILC MAX lubricator will be the most cost effective and most reliable solution to achieve this. Once designed and installed correctly the ILC max lubricator will never over or under lubricate giving your machine the ultimate lifespan.



The ILC MAX can be used in any industries such as:

- Agriculture
- Construction
- Mining
- Transport
- Industry
- Food processing
- Wind
- Printing

Coupled with progressive divider valves and designed correctly the ILC Max can be used to lubricate from 1 to many hundreds of lubrication points.

Available in several sizes from 2kg, 4kg and 8kg and a choice of 12V, 24V or 240V suitable for oil and grease.

HOW IT WORKS

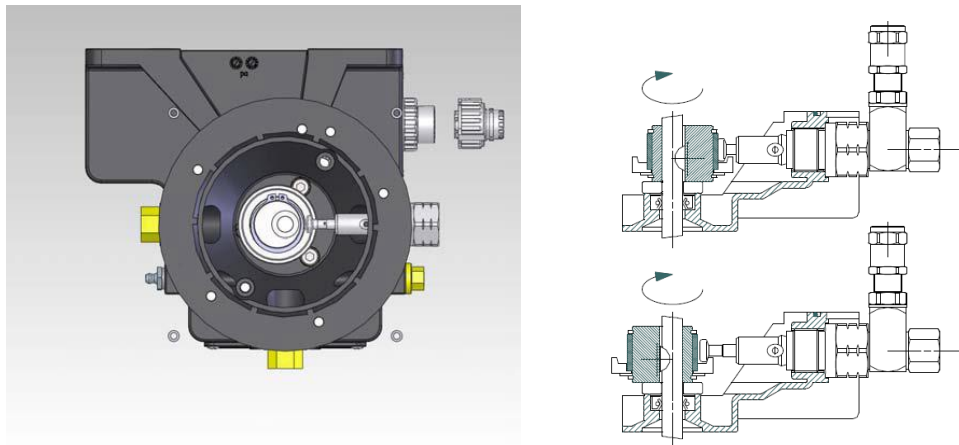
ILC MAX – PUMP

The pumps are designed for intermittent or continuous operation to provide regular pre-programmed lubrication cycles as required for the various applications.



ILC MAX Pumps 2kg, 4kg 8kg

A direct-mounted electric geared motor drives an internal rotating cam, which can actuate up to three externally mounted pump elements. Every pumping element has a relief valve to protect the system against over-pressure.



ILC MAX Pumping elements

The pumps can attain a maximum operating pressure of 250 bar and will delivery up to 2.88cc/minute per outlet. The internal drive shaft is coupled to a specially formed stirring paddle in the reservoir which ensures continuous priming of the pump element.

The gear motor is protected by mean of an IP-56 protection degree covering (NYLON PA6 +30% FIBERGLASS). The seal is guarantee from well mounted “o”-ring. The pumps can have an integrated electronic control timer built into the covering. The timer can be pre programmed to automatically operate the pump with variable “working time” and “pause times”.

Features:

- Suitable for oils from 46-1500 cst
- Suitable for greases NLGI 000, 00, 0, 0, 1, 2
- Available in 2 KG, 4 KG or 8 KG transparent reservoirs
- Number of outlets 3
- Operating temperature -20°C to 80°C
- 12V, 24V or 240V.
- Springless pumping element
- Use with DPX progressive divider to lubricate hundreds of lubrication points
- Each system is equipped with a grease strainer to eliminate dirt entering the system

The pump is coupled with progressive divider valves and high pressure tube and fittings, to become centralised lubrication system.

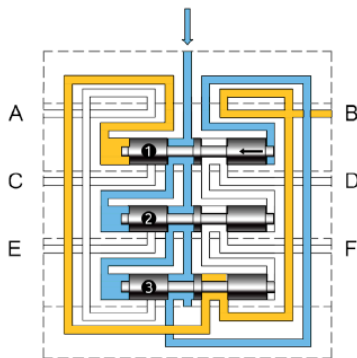
The pump can either be used with one progressive divider valve, or several progressive divider valves. The first progressive divider valve is then deemed the master divider and the consecutive progressive valves are then deemed the secondary divider valves.



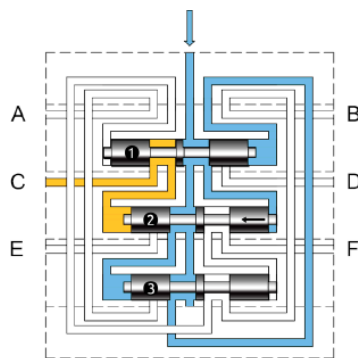
Typical Progressive lubrication set up with master and secondary divider valves

DPX progressive divider valve

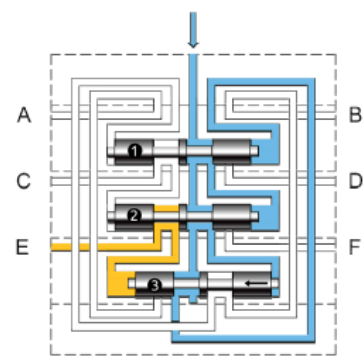
DPX Progressive divider valves are built in a variable segments construction. Therefore, the divider valve can be, depending on the number of lubrication points, extended or shortened. Because of the segments construction there is the possibility to join individual distributor disks (middle element, end element) with different metering volumes together to one complete progressive valve. The different metering volume per stroke is effected by different piston diameters.



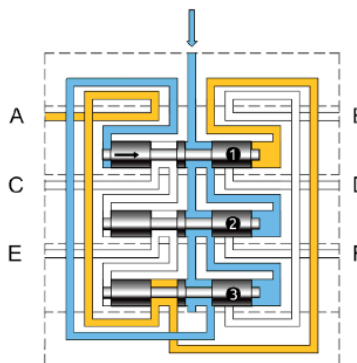
When piston 1 reaches its limit, lubricant flow pressure (blue) operates on piston 2. Lubricant volume (yellow) discharge from C.



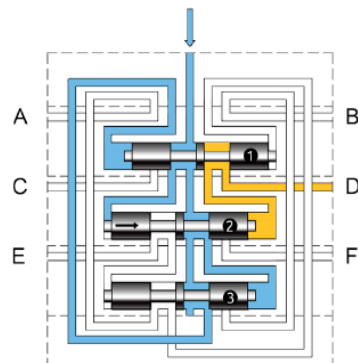
When piston 1 reaches its limit, lubricant flow pressure (blue) operates on piston 2. Lubricant volume (yellow) discharge from C.



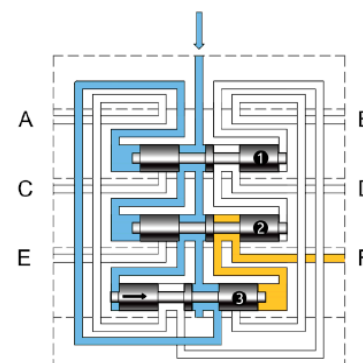
When piston 2 reaches its limit, lubricant flow pressure (blue) operates on piston 3. Lubricant volume (yellow) discharge from E.



When piston 3 reaches its limit, lubricant flow pressure (blue) operates on piston 1. Lubricant volume (yellow) discharge from A.



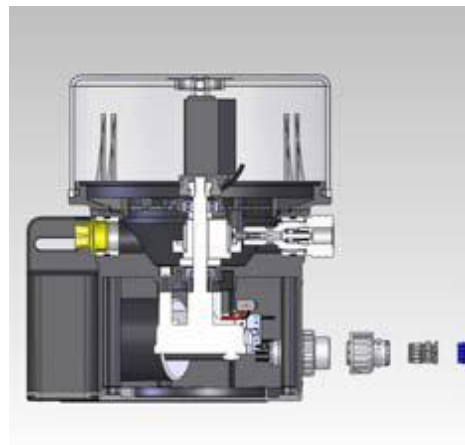
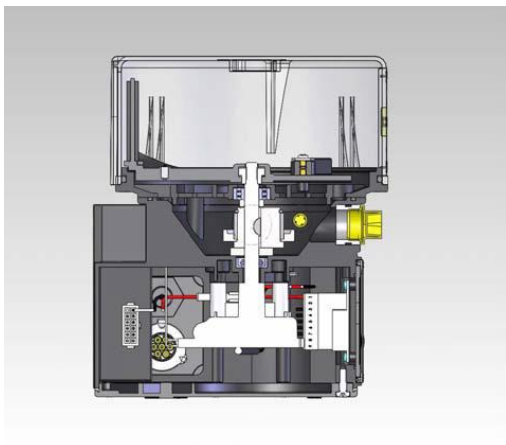
When piston 1 reaches its limit, lubricant flow pressure (blue) operates on piston 2. Lubricant volume (yellow) discharge from D.

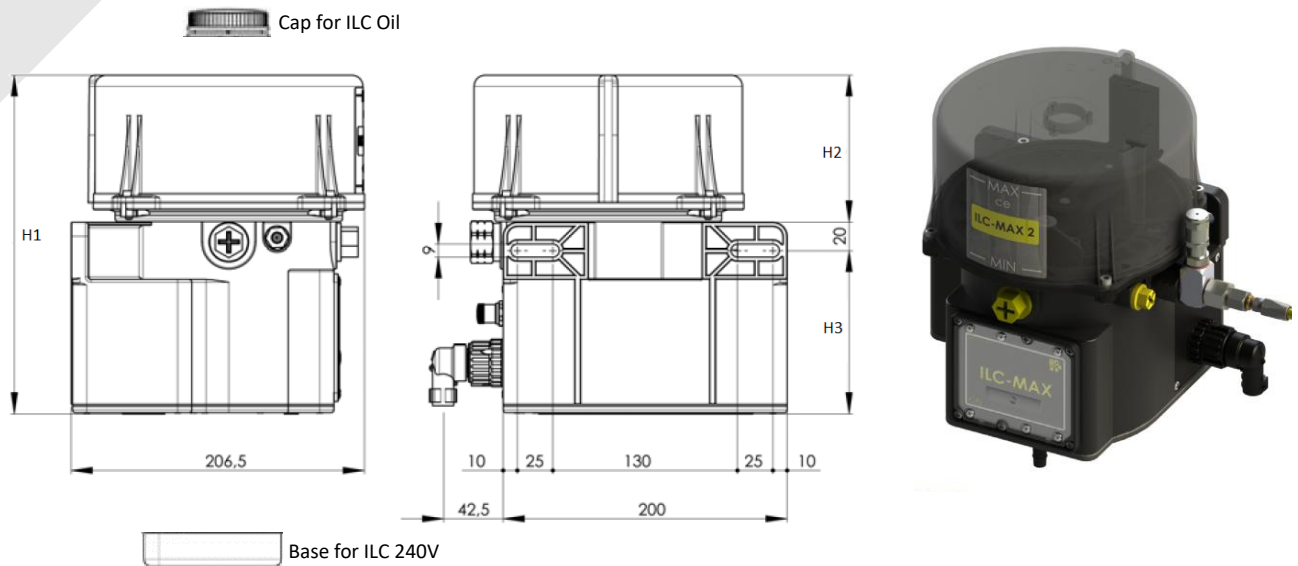


When piston 2 reaches its limit, lubricant flow pressure (blue) operates on piston 3. Lubricant volume (yellow) discharge from F. The system is ready for a new cycle.

TECHNICAL DATA
ILC MAX PUMP

Number of outlets	FROM 1 TO 3
Discharge/revolution with fixed pumping element	0.16 CC
Discharge/revolution with adjustable pumping element	0.01 – 0.16 CC
RPM	23 rpm (12 V DC) 22 rpm (24 V DC) 29 rpm (230 V AC)
Discharge/min with fixed pumping element	3.68 cm ³ (12 V DC) 3.52 cm ³ (24 V DC) 4.64 cm ³ (230 V AC)
Discharge/min with adjustable pumping element	0.23 – 3.68 cm ³ (12 V DC) 0.22 – 3.52 cm ³ (24 V DC) 0.29 – 4.64 cm ³ (230 V AC)
Suitable grease *For ILC MAX Grease	NLGI 000, 00, 0, 1, 2
Suitable Oil *For ILC MAX Oil	MINERAL OIL 50-1500 cst
Maximum counter pressure	275 BAR (3993 PSI) ±10%
Reservoir capacity	2KG - PLASTIC 4KG – PLASCTIC 8KG - PLASTIC
Temperature range	-20 °C TO +80 °C
Outlet connection	1/4" BSP
Low Level switch	1A 140VAC – 200VDC 10 W NO A pulse from open to close is created at every revolution when reservoir is empty
RPM control	1A 140VAC – 200VDC 10 W NO – Contact closes at every rotation


Cross sectional view of the ILC Max

Dimensions


ILC MAX	Grease 12V and 24V			Grease 240V			Oil 12V and 24V			Oil 240V		
	2kg	4kg	8kg	2kg	4kg	8kg	2kg	4kg	8kg	2kg	4kg	8kg
H1*	239.50	314.50	493.5	263.5	338.5	516.3	256.5	331.5	510.5	280.5	355.5	510.5
H2	104	179	356	104	179	356	121	196	375	121	196	375
H3	115.5	115.5	115.5	139.5	139.5	139.5	115.5	115.5	115.5	139.5	139.5	139.5

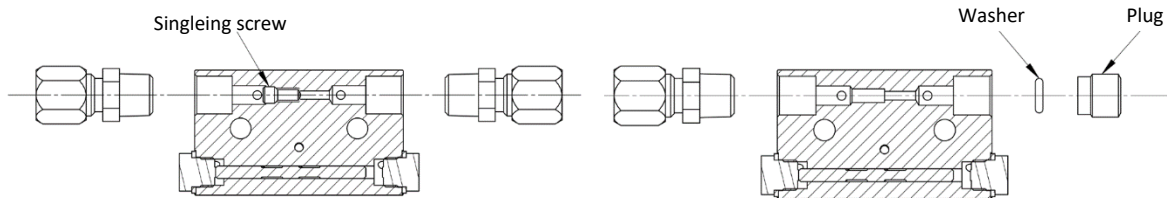
H1* = overall height including cap & 240V base

All sizes are in mm

DPX Divider Valve

Discharge / Stroke for each outlet	25 mm³ - 45 mm³ - 75 mm³ - 105 mm³
Elements number	From 3 to 12
Operating pressure	From 15 to 300 Bar
Operating temperature	-20° C a + 100° C
Body distributor	Galvanized Steel Zi-Ni (free from Cr-V)
Number of cycle/minute	Max 300/min
Inlet	M10 x 1
Outlets	M10 x 1
Mounting screws	M5 x 30
Lubricants	Mineral Oil 46 cSt - Grease Max NLGI-2
Control elements	Visual and electric for signalling cycle and overpressure
Main tube	Ø OD 8-6mm or Ø OD 11.3mm high pressure tube
Secondary tube	Ø OD 6mm nylon tube

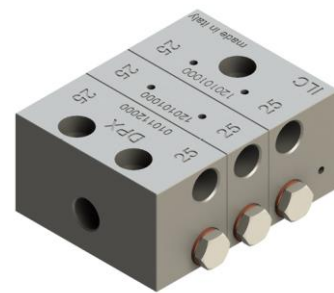
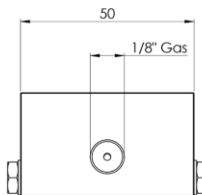
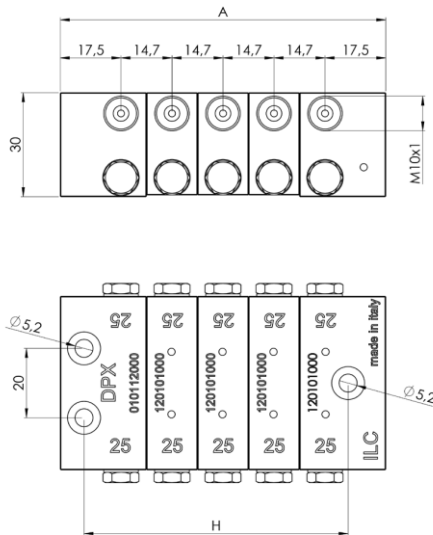
Each progressive divider segment is able to feed 1 or 2 outlets. Each segment comes inserted with a singleing screw (grub screw) to feed both outlets. When the singleing screw is taken out, it is necessary to plug the other outlet thereby doubling the outlet of the open side.



A bridging element is available if two outlets from two sections need to be connected together.

Important!

It is not possible to shut both outlets of a divider valve segment. Any changed made to a divider valve need to be made in a clean environment.



DPX Progressive Divider Valve

Outlets	A(mm)	H(mm)
6	64.4	46.7
8	79.1	61.4
10	93.8	76.1
12	108.5	90.8
14	123.2	105.5
16	137.9	120.2
18	152.6	134.9
20	167.3	149.6
22	182.0	168.3
24	196.7	179

FITTING, TUBE AND ACCESSORIES

A range of fitting are available. Ranging from push in, compression, extensions, elbows, check valves and banjo fittings.



A range of tube are available. Ranging from 4mm nylon to 11.3 high pressure tube



A range of accessories are available ranging from pressure gauges, filling equipment, protective parts, couplings, oil brushes and brackets.

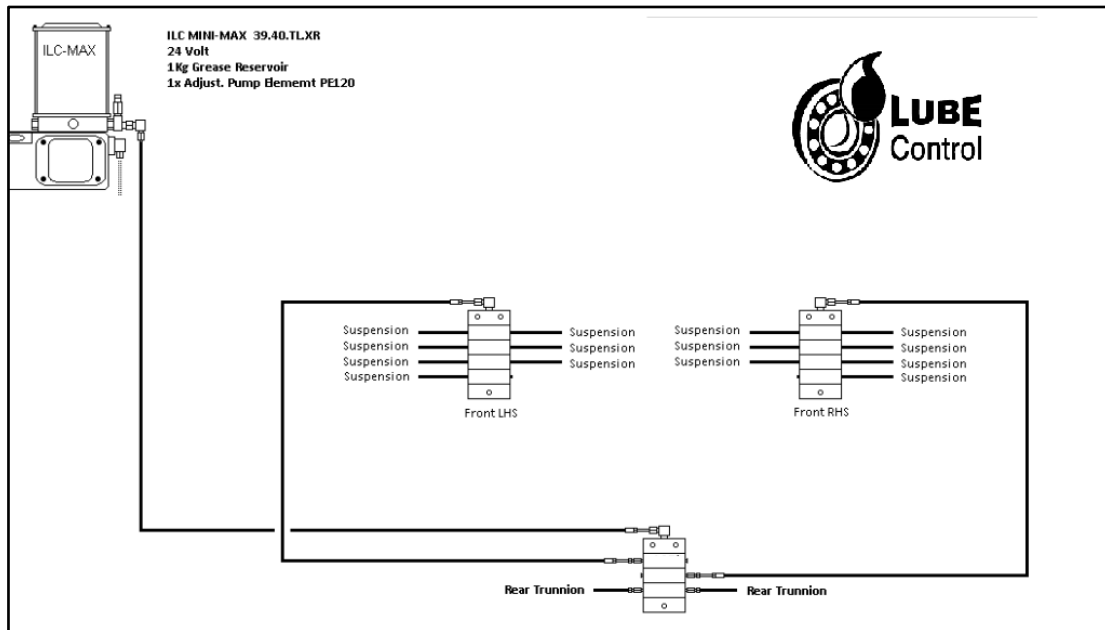


Please see our spare parts catalogue for more information

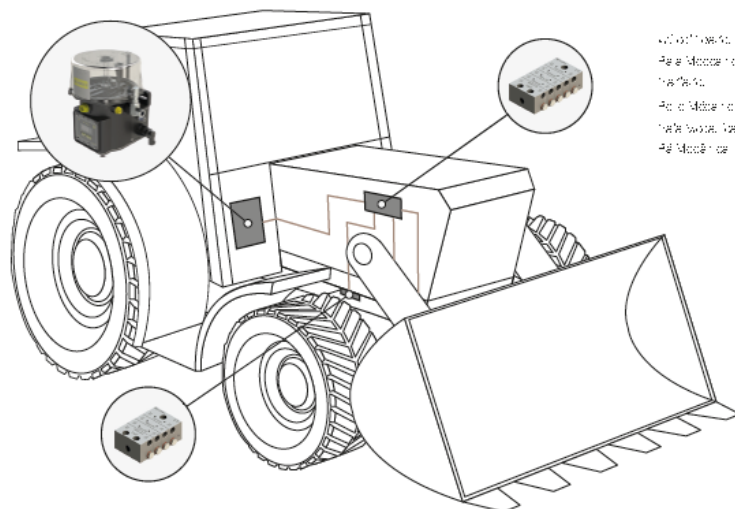
SYSTEM DESIGN AND COMPLETE INSTALLATION PACKAGES

Utilising the ILC MAX Lube Control can design auto lube systems to suit your machine, weather you are an owner operator, a plant maintenance engineer, OEM or reseller.

Whether you are lubricating one point or hundreds of points, bearings, bushes, gears or chains - we'll design the correct system for you, and if needed we'll install and commission the system too. Get in touch with us today to discuss your lubrication system design.



*Example of custom lubrication system design:
Isuzu chassis lubrication system*



Typical wheel loader mounting locations



Lube Control Pty Ltd

Providing lubrication solutions!

www.lubecontrol.com.au
sales@lubecontrol.com.au

Australia wide

1300 917 946

+61 8 8298 5563

Distributed by

