

Two-line Systems

Application

- Large systems with dispersed lube points
- Varying lubrication quantities
- Ideal for rigorous conditions and extreme temperatures

Industries

- Cement plants
- Steel mills
- Power plants
- Mining
- Large machines

Advantages

The advantage of a two-line system is that it supplies an exact metered quantity of lubricant from one pump station over large distances.

The devices are operated by two main lines. As the system cycles, it alternately pressurizes or relieves the flow of lubricant from one line to the other. With each cycle, lubricant is dispensed to one half of the lubrication points.

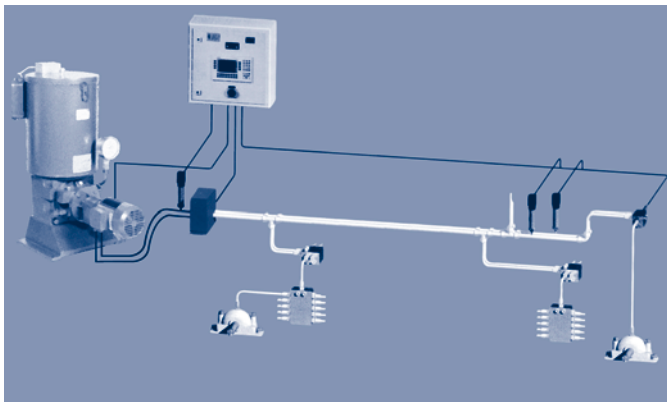
For some applications, the two-line system can be combined with secondary progressive metering devices, such as Lincoln's Quicklub® SSV divider valve. This increases the total number of lubrication points that can be served by a two-line system and reduces the cost per point.

Capabilities

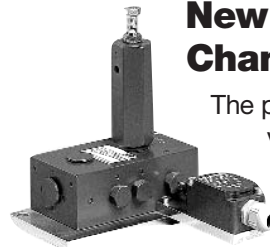
Lincoln's high pressure capability allows small diameter tubing to be used, reducing installation and material costs. This also reduces the amount of grease in the tubing which over a long period of time may deteriorate.

The system features visual monitoring of each metering device outlet pair.

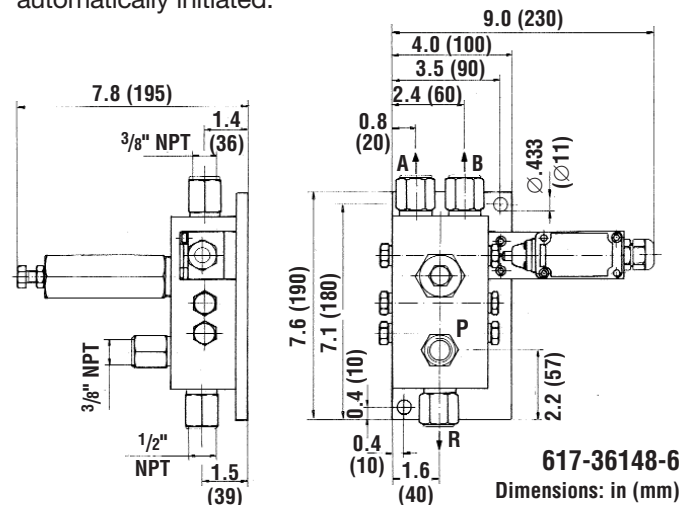
All working outlet pairs will continue to function normally and provide lubrication to all other bearings even if a bearing clogs or a metering device outlet fails to function.



New and Improved Change-Over Valves DU1



The pressure-controlled DU1 change-over valve is the heart of the Lincoln two-line system. The operating principle is similar to that of a 4/2 way valve which alternately discharges the lubricant fed by the pump into one of the two main lines while the other line is connected to the return line connection of the pump. Once a preset pressure is reached the change-over process is automatically initiated.



Available in Four Models*

Part No.	Model	Description
617-36148-6	DU1-GKS-A	Mounted on a base plate with indicator pin and limit switch with NPT adapters
617-28683-1	DU1-G	Mounted on a base plate (BSPP)
617-28619-1	DU1-GK	Mounted on a base plate with indicator pin (BSPP)
617-28620-1	DU1-GKS	Mounted on a base plate with indicator pin and limit switch (BSPP)

* Replaces discontinued DuoMatic models.

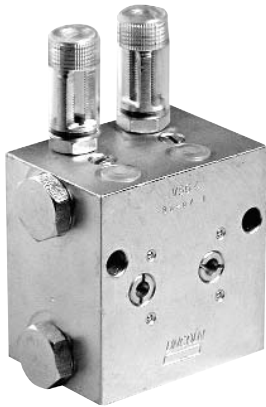
Technical Data

Flow rate	Max. 3.7 gal/hour	14 liters/hour
Operating pressure**	2030 psi to 5075 psi	140 to 350 bar
Factory setting	2465 psi	170 bar
Threaded connections	NPT Inlet 3/8" Outlet 3/8" Return line 1/2"	BSPP G 1/2 female
Operating temperature	-4°F to 176°F	-20°C to 80°C
Position switch nominal circuit voltage	25 – 60 Hz	Max. 500 V
Continuous current	10A	
Operating current	4A	

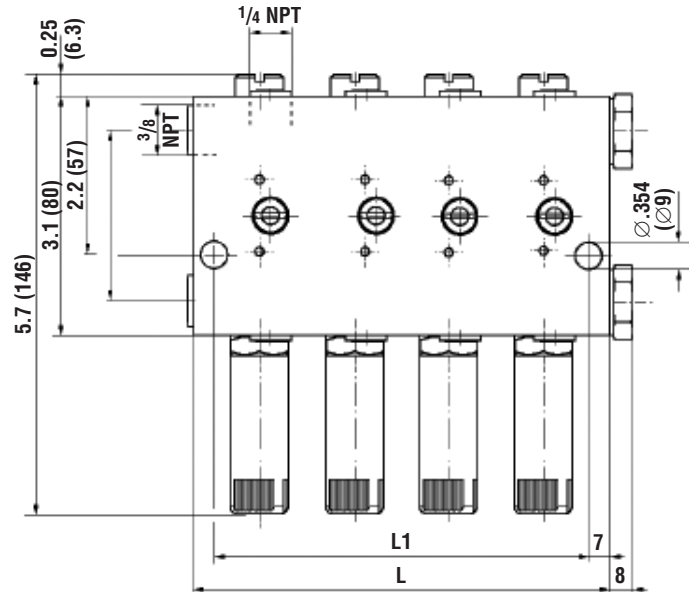
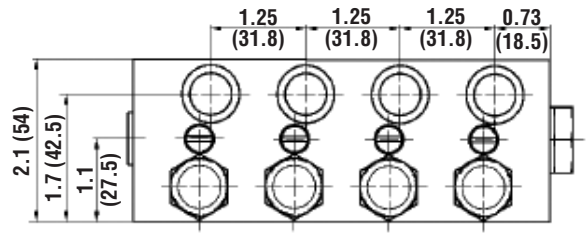
** System pressure should not exceed maximum working pressure of Lincoln two-line valves or other system components.

Two-Line Metering Devices

The VSL-KRFBM-A series devices are positive displacement metering valves with adjustable output and indicator pin. These high quality, galvanized steel metering devices are designed for two-line systems operating with pressures of up to 3500 psi. Several options have been made standard for suitability in multiple applications and environments including high temperature viton seals rated up to 350°F.



Once the output is adjusted (0 to 0.3 in³), the valve will displace an equal volume of grease through two, coupled outlet ports. A lockable rotary slide allows a pair of outlets to be cross-ported. This feature plugs one of the outlets enabling one bearing to receive double the lubricant per cycle.



Dimensions: in (mm)

Specifications

Output per cycle	0 to 0.3 in ³ (0 to 5 cm ³)
Inlet size	3/8" NPT
Outlet size	1/4" NPT
Operating pressure	507 to 3500 psi (35 to 240 bar)
Operating temperature	Max. 248°F (120°C)
Seal material	Flouorocarbon (Viton)

Available Models*

Model No.	Description	Outlets		Dimensions in (mm)	
		Max.	Min.	L1	L
620-40937-2	VSL2-KRFBM-A	2	1	1.20 (30.5)	1.75 (44.5)
620-40937-4	VSL4-KRFBM-A	4	2	2.44 (62)	3.00 (76)
620-40937-6	VSL6-KRFBM-A	6	3	3.70 (94)	4.25 (108)
620-40937-8	VSL8-KRFBM-A	8	4	4.96 (126)	5.50 (140)

* Replaces discontinued DuoMatic models.



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