LINCOLN®

QUICKLUB® CENTRALIZED & AUTOMATED LUBRICATION SYSTEMS

Quicklub—Simple, cost-effective lubrication solutions for all of your machinery.

People, Capabilities and Systems to Save Money and Increase Productivity

We're the largest and most successful company in our field because we continually satisfy our customers with the world's best lubrication and pumping systems. For almost 90 years, companies have relied on our technical and quality leadership, our world-class manufacturing and customer service and our vast network of distributors and support facilities.

Lincoln develops new products and systems at research and development facilities in the U.S., Germany and India that provide global and regional application solutions.

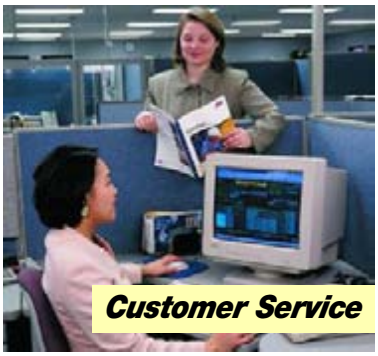
We have solutions for large processing plants, automotive manufacturing, pulp and paper mills and food and beverage facilities. Virtually every industrial professional involved in operations and maintenance can benefit from Lincoln systems.

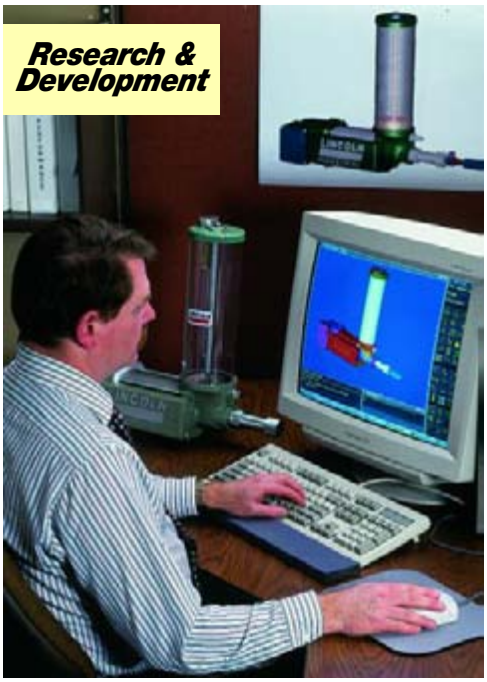
On the road or in the field, Lincoln protects heavy equipment used in mining, construction, agriculture and over-the-road trucking. The world's leading manufacturers offer our systems as standard equipment or factory options.

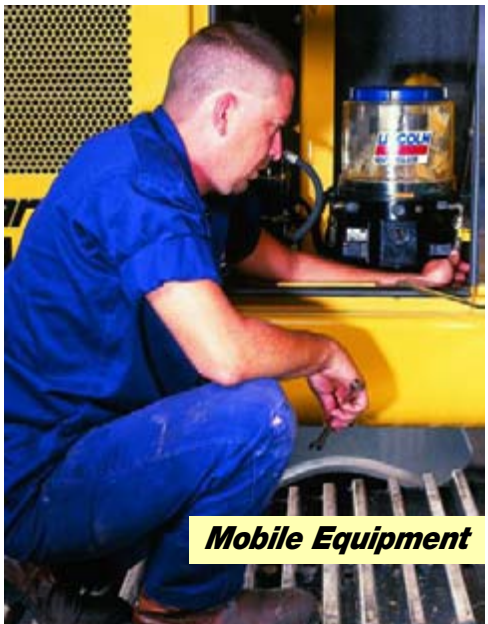
Lincoln builds precision metal components, state-of-the-art electronic controls and the industry's top-performing pump systems. Our quality systems in the United States and Germany are ISO 9001 registered.

With five technical support centers on three continents and a network of system houses and distributors supported by regional sales and service offices, our customers can always draw on our worldwide resources.

To make sure your investment results in significant savings, Lincoln developed a unique program called BearingSaver®. You not only get a complete audit of your facility, you also receive an analysis of your return on investment.







Quicklub® Lubrication Systems
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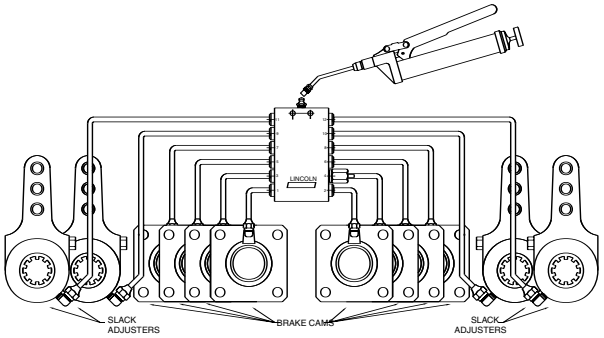
Quicklub® Lubrication Systems
Introduction to Quicklub®

The Lincoln Quicklub system is designed to provide a relatively simple and inexpensive method of centralizing or automating the lubrication of machinery bearings.

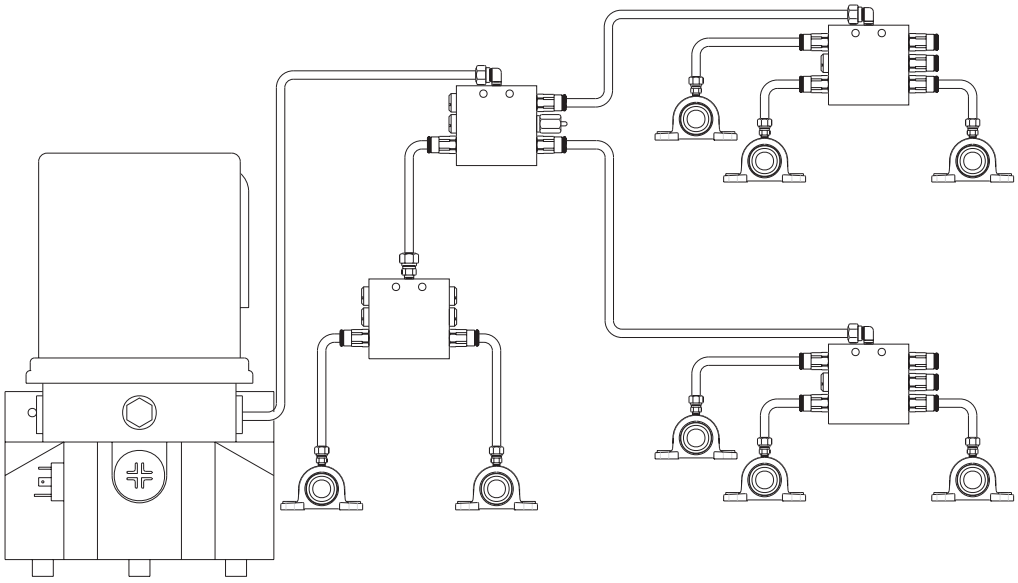
Quicklub can be a simple, centralized system with lubricant supplied manually from a lever gun. Pre-assembled kits are available to service up to 12 points from a single grease fitting. Custom kits can also be provided by our distributors to cover virtually any quantity of points desired.

Quicklub® lubrication method
A Quicklub® centralized lubrication system typically dispenses measured amounts of lubricant to each point covered by the system. Even those hard to reach are assured of being properly lubricated and purged of contaminants.



System Operation
1. The lubricant is delivered to the divider valves through a hand- or air-operated grease gun.
2. The divider valve dispenses lubricant in measured amounts directly to each point being covered by the system through the feedlines. Visual indication of cycle pin assures that all points are lubricated.

Quicklub can also be a fully automated system with lubricant supplied by our 12VDC and 24VDC electric or pneumatic pumps. An automated lubrication system typically dispenses small measured amounts of lubricant at frequent intervals while production machines are operating. The electric pumps incorporate an integrated timer for easy installation and trouble-free operation.



Quicklub systems have proven to be the right solution for many industries and applications, eliminating costly, manual point-by-point lubrication. Examples include:

Mobile Equipment
- Over-the-road tractors
- Single-axle trailers
- Tandem-axle trailers
- Tri-axle trailers
- Yard tractors
- Trucks of all types
- Refuse haulers
- Wheel loaders
- Hydraulic excavators
- Motor graders
- Backhoe loaders
- Hydraulic hammers
- Street sweepers
- Road & highway paving equipment

Industrial Equipment
- Packaging
- Lathes
- Beverage industry
- Textile
- Metal working
- Wood processing
- Material handling equipment
- Bakery
- Printing
- Punch presses
- Paper converting
- Milling
- Plastic processing

The heart of the Quicklub® system

More than a drilled manifold block, the valve incorporates a series of metering pistons which accurately dispense lubricant from each outlet, overcoming back pressure of up to 1,000 psi. Visual monitoring is provided with an indicator pin, which confirms a valve has completed a full cycle. Quicklub divider valves are available for grease or oil applications and in carbon steel and 303 stainless steel for corrosive environments.

Figure 1

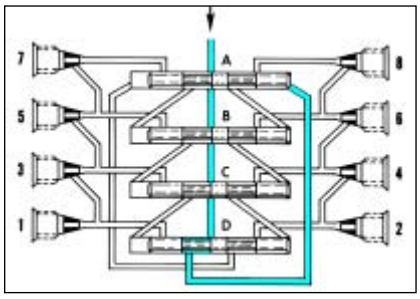


Figure 2

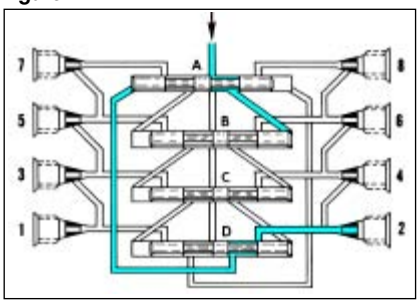


Figure 3

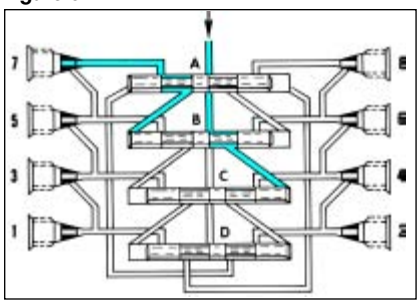
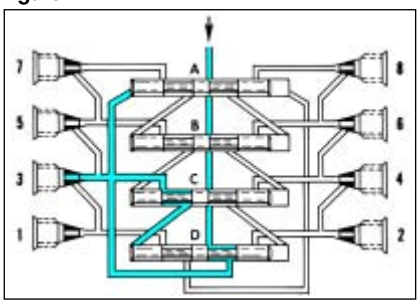


Figure 4



The inlet passageway is connected to all piston chambers at all times with only one piston free to move at any time.

- With all pistons at the far right, lubricant from the inlet flows against the right end of piston A (fig. 1).
- Lubricant flow shifts piston A from right to left, dispensing lubricant through connecting passages to outlet 2. Flow is then directed against the right side of piston B (fig. 2).
- Piston B shifts from right to left, dispensing lubricant through outlet 7. Lubricant flow is directed against the right side of piston C (fig. 3).
- Piston C shifts from right to left, dispensing lubricant through outlet 5. Lubricant flow is directed against the right side of piston D.
- Piston D shifts from right to left, dispensing through outlet 3. Piston D's shift directs lubricant through a connecting passage to the left side of piston A (fig. 4).

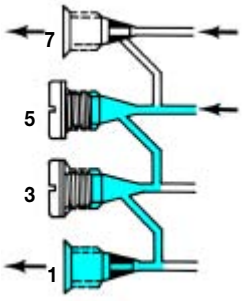
Lubricant flow against the left side of piston A begins the second half-cycle, which shifts pistons from left to right, dispensing lubricant through outlets 1,8,6 and 4 of the divider valve.

Crossporting a divider valve

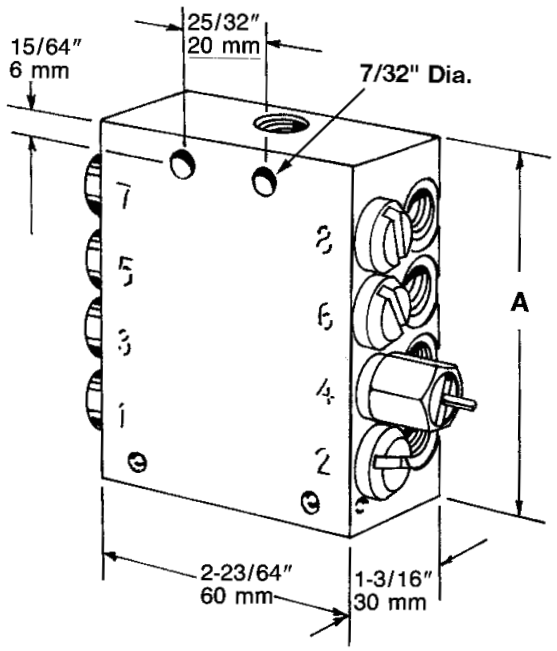
Outputs from adjacent outlets may be combined by installing a closure plug in one or more outlets. Lubricant from a plugged outlet is redirected to the next adjacent outlet in descending numerical order. Outlets 1 and 2 must not be plugged since they have no cross-port passage to the next adjacent outlet.

In figure 5, outlets 5 and 3 are cross-ported and directed through outlet 1. In this example, outlet 1 will dispense three times as much lubricant as outlet 7. The tube ferrules in outlets 1 and 7 block the cross-port passage so that lubricant flow is only directed through outlets.

Figure 5



SSV Divider Valves



The SSV Divider Valve is the “heart” of a manual or automated Quicklub system. Featuring from 6 to 18 outlets, the SSV valve is available in carbon steel and 303 stainless steel for corrosive environments. Valves are available with cycle indicator pins to provide visual indication of system operation.

Specifications:

Construction Material	Max. Operating Pressure psig / bar	Output/Cycle per Outlet cu. in. / cc	Lubricant Inlet	Operating Temp.	
				min	max
Carbon Steel	4350 / 300	.012 / .2	⅛" NPTF(F)	-22˚F (-30˚C)	212˚F (100˚C)
Stainless Steel			⅛" BSPP(F)*		

Note: Lubricant outlet must use Lincoln Quicklub fittings. See Divider Valve Accessories section.
* 241650 stainless steel adapter available to convert inlet to ⅛" NPTF (F).

Model No.		Max. No. of Outlets	Cycle Indicator Pin	Dimension A in. / mm
Carbon Steel	303 Stainless Steel			
619-27121-1		6	No	2.36 / 60
619-27122-1	619-27472-1		Yes	
619-26396-2		8	No	2.95 / 75
619-26646-2	619-27474-1		Yes	
619-26844-1		10	No	3.54 / 90
619-26845-2	619-27476-1		Yes	
619-26398-2		12	No	4.14 / 105
619-26648-2	619-27478-1		Yes	
619-29400-1		14	No	4.8 / 120
619-28899-1			Yes	
619-28900-1		16	Yes	5.4 / 135
619-29401-1			No	
619-28901-1		18	Yes	6.50 / 165

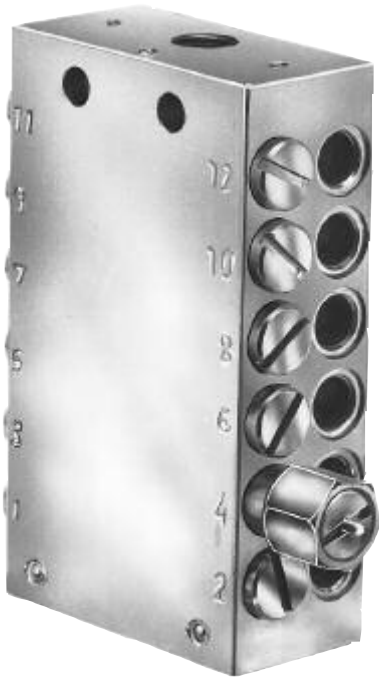
Note: You must use outlets 1 and 2 for each of the above referenced models to allow the system to operate properly.

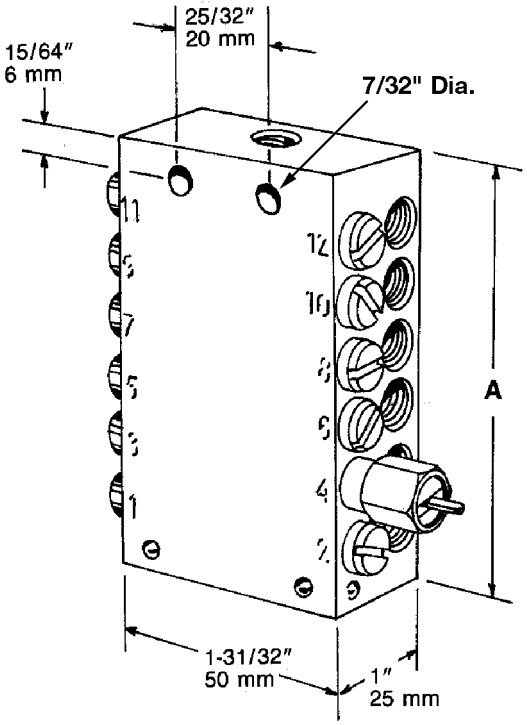
SSV Divider Valve Accessories

Model Number	Description
249010	Cycle switch for providing feedback monitoring for SSV systems
234-13178-1	Proximity switch with open end plug

Note: Cycle switch can only be used with SSV Series Quicklub valves that have indicator pins. Remove slotted plug from indicator assembly on valve prior to installing switch.

SSVM Divider Valves





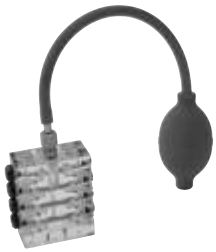
The SSVM Divider Valve is smaller in overall size than the SSV series and provides smaller volume output per outlet. Available with 6 to 12 outlets, the SSVM series valve is used primarily in oil system applications.

Specifications:

Construction Material	Maximum Operating Pressure psig / bar	Output/Cycle per Outlet cu. in. / cc	Lubricant Inlet	Operating Temp.	
				min	max
Carbon Steel	1450 / 100	.0037 / .06	⅛" NPTF(F)	-22˚F (-30˚C)	212˚F (100˚C)

Model No. Carbon Steel	Maximum Number of Outlets	Cycle Indicator Pin	Dimension A in. / mm
619-26764-1	6	No	1.91 / 48.5
619-26765-3		Yes	
619-26650-1	8	No	2.36 / 60
619-26651-3		Yes	
619-26848-1	10	No	2.81 / 71.5
619-26849-2		Yes	
619-26653-1	12	No	3.26 / 83
619-26654-3		Yes	

Note: You must use outlets 1 and 2 in all systems.



Divider Valve Accessories

Model Number	Description
619-36732-1	Demonstration Valve

Electric Grease Pumps (for Mobile Applications)

Supply up to NLGI #2 grease (depending on temperature) to divider valves.

Note: Customer must furnish a 12- or 24-volt D.C. power source.

Output/Min Per Element:**	.171 cu. in. / 2.8 cc
Lubricant Outlet:	⅛" NPT (F)
Max. System Operating Pressure:	3600 psig / 248 bar
Enclosure Rating:	IP6K9K*
Operating Temperature Range:	Min. -13°F / -25°C Max. 158°F / 70°C
Reservoir Capacity:	2-, 4-, 8- or 15-liter ***
Reservoir Fill Method:	By grease fitting
Pressure Relief Valve:	4000 psi, +/- 250 / 276 bar, +/- 17

* Protected from water sprayed in all directions.
** Single 6mm element standard; to increase pump output, add one or two additional element(s) #600-26876-2 and relief valve #270864.
*** Contact Lincoln for 15-liter reservoir models.

Model Specifications:

Model No.	Electrical Requirements	Interval Timer Setting				Reservoir Capacity		
		On Time* (2 minute increments)		Off Time (1 hour increment)		lb.	kg.	liter
		Min	Max	Min	Max			
94012	12 VDC 3.5 Amps	2 minutes	30 minutes	1 hour	15 hours	4	1.8	two
94412						8	3.6	four
94812						16	7.2	eight
94024	24 VDC 2 Amp					4	1.8	two
94424						8	3.6	four
94824						16	7.2	eight

* Can be set for either minutes or seconds.

Models 94124, 94224 and 94212 (for Industrial Applications)

These industrial lube pumps are electrically operated and are used in progressive type (Quicklub or Modular Lube) automated lubrication systems. The pump consists of a nylon housing, electric gear motor and a plastic reservoir with stirring paddle. One model incorporates a built-in timer, with the other two cycled by independent timers or machine controls. The pump's ability to develop high operating pressures allows it to supply lubricant up to NLGI #2 grease in most ambient temperatures.

Model Specifications:

Model No.	Electrical Requirements	Interval Timer Setting				Reservoir Capacity		
		On Time* (2 minute increments)		Off Time (1 hour increment)		lb.	kg.	liter
		Min	Max	Min	Max			
94124	24 VDC 2 Amps	2 min.	30 min.	1 hour	15 hours	4	1.8	two
94224								
94212	12 VDC 3.5 Amps	Timer not included wit Models 94224 and 94212. Select external timer from System Controls section						

* Can be set for either minutes or seconds.

Pump Accessories

Model No.	Description
256276	Remote push-button manual lube kit for pumps with round bayonet-style connectors
246322	Remote push-button manual lube kit for pumps with square DIN connectors
241419	12 VDC illuminated manual switch
241484	24 VDC illuminated manual switch

Electric Grease Pumps with Low-Level Sensor and Internal Microprocessor Controls for Feedback Monitoring

Supply up to NLGI #2 grease (depending on temperature) to divider valves.

Electrical Requirements	
Input:	12 VDC @ 3.5 amps, 24 VDC @ 2 amps 94 - 265 VAC (50 to 60 Hz)
Enclosure Rating:	IP6K9K *
Alarm Time:	30 minutes
Interval between Lube Cycles:	Min. 4 minutes / Max. 15 hours
Pump Output:	0.171 cu. in./min. / 2.8 cc/min.
Outlet Connection:	⅛" NPT (F)
Reservoir Capacity:	2-, 4-, 8- or 15-liter **
Maximum Recommended Operating Pressure:	3600 psi / 248 bar
Lubricant:	Greases up to NLGI grade 2 (depending on operating temperature and type of lubricant)
Temperature Range:	-13°F to 158°F / -25°C to 70°C
Pressure Relief Valve:	4000 psi, +/- 250 / 276 bar, +/- 17

Note: Do not use pump without pressure relief valve. * Protected from water sprayed in all directions.
** Contact Lincoln for 15-liter reservoir models.

Model Specifications

Model No.	Description	Power	Control Settings: Interval Between Lube Cycle Min.	Control Settings: Interval Between Lube Cycle Hrs.	Control Settings: Alarm Time Min.	Reservoir Capacity: Liters	Reservoir Capacity: In³	Reservoir Capacity: Lbs.
94222	P203-2XL-1K6-24-2A6.15-M13-A+SV	24 VDC	4 - 60	1 -15	5 or 30	2	122	4
94422	P203-4XLBO-1K6-24-2A6.15-M13-A+SV	24 VDC	4 - 60	1 -15	5 or 30	4	244	8
94822	P203-8XLBO-1K6-24-2A6.15-M13-A+SV	24 VDC	4 - 60	1 -15	5 or 30	8	488	16
644-40821-3*	P203-2XNBO-1K6-12-2A6.15-M08	12 VDC	4 - 60	1 -15	5 or 30	2	122	4
644-40843-8*	P203-4XLBO-1K6-12-2A6.15-M08	12 VDC	4 - 60	1 -15	5 or 30	4	244	8
644-40822-8*	P203-8XLBO-1K6-12-2A6.15-M16	12 VDC	4 - 60	1 -15	5 or 30	8	488	16
644-40873-1*	P203-8XLBO-1K6-AC-3A5.01-M08	120 VAC	4 - 60	1 -15	5 or 30	8	488	16

***These "644-" pumps do not come with the pressure relief valve. It must be ordered separately and is recommended. The 1/8" NPT adapter (304-19614-1) is also not included and must be ordered separately, if required.**

Model No.	Description
624-28894-1	Pressure Relief Valve 350-R ¼" A-D6
624-28895-1	Pressure Relief Valve 350-R ¼" A-D8
624-28931-1	Return to Reservoir Pressure Relief Valve

Quicklinc Push-In Style Fittings for Nylon Tubing

Model No.	Description
244053	¼" tube x ¼"-28 male 90° swivel fitting

Proximity Switches

Electric grease pumps with Feedback Monitoring require purchase of one of the following proximity switches:

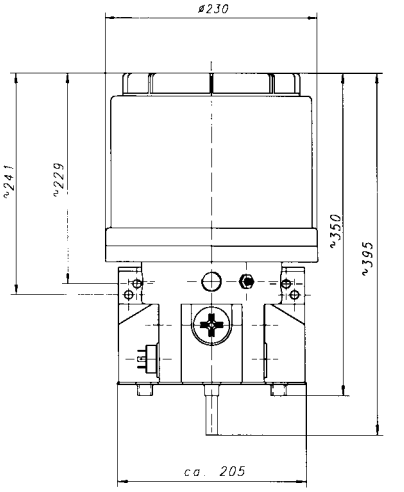
Model Number	Description	Use with Corresponding Pump Connection (see ID Code pg. 9)
234-13188-2	Bayonet 3m (9.8') cable length	6 - bayonet quarter turn
234-13188-3	Bayonet 7m (23.0') cable length	6 - bayonet quarter turn
234-13178-1	Proximity switch w/ open end plug	4 - AMP (existing field models)
234-13178-2	AMP 3m (9.8') cable length	4 - AMP (existing field models)
234-13178-5	AMP 7m (23.0') cable length	4 - AMP (existing field models)

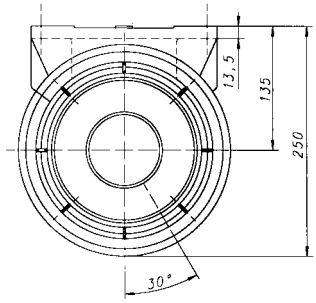
203 AC Models

This VAC pump automatically adjusts to handle a variety of electrical supply voltages (between 94- and 265-volt, 50 to 60 Hz.)

Input Voltage:	94 - 265 VAC
Operating Temperature:	-13° to 158°F / -25° to 70°C
Number and Element Size:	1 - 6mm
Reservoir Capacity:	2-, 4-, 8- or 15-liter *
Output per Minute:	Approx. 2.8 cc / 0.171 cu. in. per min.
Lubricant:	Greases up to NGLI #2 Oil with at least 40 cSt
On Time with PC Board:	2 to 30 minutes
Factory Set on Time:	6 minutes
Factory Set Pause Time:	6 hours
Max. Operating Pressure:	5000 psi / 350 bar
Connection Thread:	G¼" for 6mm or 8mm diameter tube

* Contact Lincoln for 15-liter reservoir models.





Model Specifications

Model No.	Description	Res. Cap.	Grease or Oil	Low level control	Printed circuit board
644-46073-5	P203-2XNBO-1K6-AC-1A1.01-V10 (UL)-A+SV	2 liter	Grease	No	Yes
644-46173-4	P203-4XNBO-1K6-AC-1A1.01-V10 (UL)-A+SV	4 liter	Grease	No	Yes
644-46173-5	P203-4YLBO-1K6-AC-1A1.01-V10 (UL)-A+SV	4 liter	Oil	Yes	Yes
644-46073-6	P203-2XNBO-1K6-AC-1A1.01 (UL)-A+SV	2 liter	Grease	No	No
644-46173-6	P203-4XLBO-1K6-AC-2A1.01 (UL)-A+SV	4 liter	Grease	Yes	No
644-46173-8	P203-4YLBO-1K6-AC-1A1.01 (UL)-A+SV	4 liter	Oil	Yes	No
644-46173-7	P203-4XNBO-1K6-AC-1A1.01 (UL)-A+SV	4 liter	Grease	No	No
644-46174-2	P203-8XLBO-1K6-AC-2A1.01-V10 (UL)-A+SV	8 liter	Grease	Yes	Yes
644-46073-4	P203-8XLBO-1K6-AC-2A1.01 (UL)-A+SV	8 liter	Grease	Yes	No

"(UL)" in the description refers to UL-approved, CSA-certified pumps.
Pumps with "-A+SV" come complete with the ⅛" NPT adapter and pressure relief valve.

Model No.	Description
624-28894-1	Pressure Relief Valve 350-G 1/4" A-D6
624-28895-1	Pressure Relief Valve 350-G 1/4" A-D8
624-28931-1	Return to Reservoir Pressure Relief Valve

If the ⅛" NPT adapter (part #304-19614-1) is not included, it must be ordered separately, if required.

Quicklub® Lubrication Systems
Identification Code—Pump Models 203

Examples of Codes

P 203	2	X	N		1	K6	24	1A	1	10		
P 203	4	X	N	BO	1	KR	24	2A	6	15	M13	
P 203	2	X	N		2	K5	12	1A	1	10	H	
P 203	8	X	N	BO	1	K6	24	1A	5	14	V13	
P 203	4	Y	L	BO	1	K7	24	1A	1	10	V20	
P 203	2	X	L		1	K6	24	1A	7	16	V10	

Note
Any pumps combination other the above standard pumps can be composed and ordered in accordance with the valid model identification code

Basic pump model for grease or oil with 1-3 outlets

Reservoir Design
2 = 2 l transparent plastic reservoir
4 = 4 l transparent plastic reservoir
8 = 8 l transparent plastic reservoir

X = reservoir for grease
Y= reservoir for oil

N = standard design
L = low-level control

without designation = standard reservoir (2 l)
BO = filling from top
FL = flat type reservoir (for 2l, no low level)

Pumping Element
1 - 3 number of elements

Piston Type - Piston Diameter
K5 - 5 mm
K6 - 6 mm
K7 - 7 mm
KR adjustable - 7 mm
B7 - 7 mm (outlet same as K5)
S7 - 7 mm (food industry)

Operating Voltage
12 VDC or 24 VDC (DC motor)
AC = 94 - 265 VAC (47 - 63 HZ) with 24 VDC motor

Number of Connection Possibilities
1A = 1 connector (left), power supply [1]
1A = 1 connector (left), power supply [2]
1A = 1 connector, power supply left + illuminated push button for additional lubrication, low level [3, C]
2A = 2 connectors, power supply (left) [1, +] illuminated push button for additional lubrication, low-level (right) [1, C] (V10 - V13, V20 - V23, H)
2A = 2 connectors, power supply (left) + illuminated push button for additional lubrication , low-level (left))[3, C] and piston detector (right) [4] (M08 - M23)

Type of Connection
1 = square type connector (DIN 43650, type A) [1]
5 = bayonet plug, 4/3 , DIN 72585-1 [2] (V10-V13, V20-V23, H)
6 = bayonet plug, 7/5 , DIN 72585-13) (M08-M23)
7 = bayonet plug, 7/6 , DIN 72585-1 [3] (V10-V13, V20-V23)

Connection Outside the Pump
00 = without socket outlet, without cable
01 = socket outlet, without cable [1]
10 = socket outlet, with 10 m cable [1]
11 = socket outlet, with 10 m ADR cable [A, 1]
14 = socket for bayonet, with 10 m cable, 4/3 [2], V10-V13, V 20-V23, no low level, no illuminated push button [C]
15 = socket for bayonet with 10 m cable, 7/5 [3], M08-M23
16 = socket for bayonet, with 10 m cable, 7/6g [3], V10-V13, V 20-V23, with low level or illuminated push button [C]
17 = socket for bayonet with 10 m ADR-Cable [A], 4/3 [2], (V10-V13, H)

P.C.B. for 12 / 24 VDC
V10 - V13 = adjustable pause and operating time [1, 2, 3]
H = for trailers and semi trailers [1, 2]
without designation = without p.c.b. [1, 2]
M08 - M23 = with microprocessor control [3] different model in accordance to the jumper position
No designation, pump without control p.c.b.

The Figures [1, 2, 3] are in conjunction with those of the "Type of connection" determining the connector you could use
[A] For hazardous material transport
[B] C7 = for supply of chisel paste
[C] low level for oil; the connection for low level is not taken into consideration

233 Pumps with Data Logger QuickData

The 233 centralized lubrication pump is a powerful and robust compact multi-line pump that can drive up to three elements and is used in progressive (Quicklub or Modular Lube) automated lubrication systems. The 233 is ideal for mobile applications, rental machines and construction machines. Versatile, compact and economical, this pump is enhanced with low-level control, printed circuit board MDF00 with attached data logger module and a keypad with display.

QuickData Displays
- Current status and operating data
- Malfunctions of the lubrication system with the time of occurrence
- Remedying of the malfunction with date, time and duration of malfunction
- Low-level signal of reservoir and regular refilling
- Modifications in the pause time programming
- Number of automatically and manually triggered lube cycles as well as the corresponding lubricant consumption
- Power supply interruptions

All data can be read out by means of a laptop or p.d.a. via an integrated or separate IR interface. All indications enable the users to draw their conclusions regarding the condition, function, reliability, usability and duration of service of the machine or the device. All information can be analyzed and documented and is then available as a written protocol. The family of 233 pumps includes 12 and 24 VDC and 120 VAC pumps. They are available with 1, 2 or 3 elements in 5, 6 or 7 mm or with an adjustable output element. Reservoir sizes are 2, 4 or 8 liters. Refer to the pump identification code for a complete listing of available pump configurations.

Model Specifications

Model No.	Description	Power	Reservoir Capacity			Grease	Low-Level Control	Printed Circuit Board
			Liters	In^3	Lbs.			
644-40824-1	P233-2XL-1K6-24-2A5.10-MDF00	24 VDC	2	122	4	Grease	Yes	Yes
644-40824-2	P233-2XLBO-1K6-24-2A5.10-MDF00	24 VDC	2	122	4			
644-40826-1	P233-4XLBO-1K6-24-2A5.10-MDF00	24 VDC	4	244	8			
644-40827-1	P233-8XLBO-1K6-24-2A5.10-MDF00	24 VDC	8	488	16			
644-40868-1	P233-2XL-1K6-12-2A5.10-MDF00-A	12 VDC	2	122	4			
644-40869-1	P233-4XLBO-1K6-12-2A5.10-MDF00-A	12 VDC	4	244	8			
644-40870-1	P233-8XLBO-1K6-12-2A5.10-MDF00-A	12 VDC	8	488	16			
644-40867-1	P233-8XLBO-1K6-AC-2A6.15-MDF00	120 VAC	8	488	16			

These pumps do not include a pressure relief valve which must be ordered separately.
Other technical data and dimensions are identical to the P203.

Accessories

Model No.	Description
236-10127-1	Infrared interface
810-55291-1	Diagnostic software
234-13188-2	Piston detector

QLS 401

The QLS 401, the newest automated Quicklub Lubrication System features a newly enhanced stirring paddle in the reservoir to prevent grease separation—even with long refill intervals. All components including an internal pressure relief valve are part of the complete package. Standard features include a built-in controller with LED display and keypad for easy programming and monitoring, and a divider block with 6, 8, 12 or 18 outlets. The integrated, all-in-one system concept reduces installation time and costs. The 12 and 24 VDC models are available with bayonet, quarter-turn type plugs for improved protection in mobile applications.

Operating Voltage:	12 and 24 VDC 120 and 230 VAC, 50/60 Hz
Operating Current:	12 VDC / 2.0 A 24 VDC / 1.0 A 120 VAC / 1.0 A 230 VAC / 0.5 A
Operating Temperature:	-10° to 158°F / -25° to 70°C
Number of Outlets:	6, 8, 12 or 18
Reservoir Capacity:	61 in^3 / 1.0 L
Protection:	NEMA 4
Lubrication Cycle Time:	20 min. to 59 hours
Number of Cycles:	For VDC: 1 to 5 cycles For VAC – SSV6/SSV8: 1 to 3 cycles For SSV12/SSV18: 1 cycle
Timer Memory:	Indefinite
Maximum Operating Pressure:	3000 psig / 205 bar
Output per Outlet & Cycle:	approx. 0.012 in^3 / approx. 0.2 cm^3
Lubricant:	NLGI 2 grease
Weight:	12.5 lbs. / 5.7 kg

Model Specifications

Model No.	Valve Type	Valve Mount	Volt	Cable
P401 31202573	SSV6	Back	12 VDC	30' / 10m
P401 31402573	SSV6	Back	24 VDC	30' / 10m
P401 42601113	SSV8	Bottom	120 VAC	none
P401 42801113	SSV8	Bottom	230 VAC	none
P401 61202573	SSV12	Back	12 VDC	30' / 10m
P401 61402573	SSV12	Back	24 VDC	30' / 10m
P401 62601113	SSV12	Bottom	120 VAC	none
P401 62801113	SSV12	Bottom	230 VAC	none
P401 91202573	SSV18	Back	12 VDC	30' / 10m
P401 91402573	SSV18	Back	24 VDC	30' / 10m
P401 92601113	SSV18	Bottom	120 VAC	none
P401 92801113	SSV18	Bottom	230 VAC	none

QLS 401 for Remote Control

The QLS 401 for Remote Control allows customers to be in control of the lubrication process. The 24 VDC models monitor system cycling with a proximity switch. An external timer or PLC controls the interval between lube cycles. The 120 VAC models have no cycle monitoring and are on/off controlled by the user's external timer or PLC. The minimum pause time requirements should be followed when setting up the external controller.

Operating Voltage:	24 VDC 120 VAC, 50/60 Hz
Operating Current:	24 VDC / 1.0 A 120 VAC / 1.0 A
Operating Temperature:	-10° to 158°F / -25° to 70°C
Number of Outlets:	6, 8, 12 or 18
Reservoir Capacity:	61 in^3 / 1.0 L
Protection:	NEMA 4
Minimum Pause Time:	4 min. DC models / 20 min. AC models
Maximum Operating Time:	25 min. DC models / 15 min. AC models
Timer Memory:	Indefinite
Maximum Operating Pressure:	3000 psig / 205 bar
Output per Outlet & Cycle:	approx. 0.012 in^3 / approx. 0.2 cm^3
Lubricant:	up to NLGI 2 grease
Weight:	12.5 lbs. / 5.7 kg

Model Specifications

Model No.	Valve Type	Valve Mount	Volt
P401 31401110	SSV6	Back	24 VDC
P401 42600110	SSV8	Bottom	120 VAC
P401 61401110	SSV12	Back	24 VDC
P401 62600110	SSV12	Bottom	120 VAC
P401 91401110	SSV18	Back	24 VDC
P401 92600110	SSV18	Bottom	120 VAC

Pump Models
Examples of part numbers

P40100400113
P40162400153

P401	6	2	4	0	0	1	5	3

Pump 401 for grease **P401**

SSV Divider Block
External, SSV 6, SSV 8[2]) (or SSV 12 and 18 without control p.c.b.) **0**
External, SSV 12, SSV 18[2]) **1**
SSV 6 (back) **3**
SSV 8 (bottom) **4**
SSV 12 . . . . . **6**
SSV 18 . . . . . **9**

[2] Note: For external divider block application only use the specific divider blocks SSV....KNQLS.

SSV Divider Block Position
External divider block. **0**
Back (vertical order) **1**
Bottom[3] (horizontal order) **2**

[3] Note: Do not use QLS 401 with SSV block in bottom-mounting position for mobile applications. Do not install the pump in areas exposed to shock.

Operating Voltage
12 VDC[1]. **2**
24 VDC[1]. **4**
120 VAC[2] (with control p.c.b. only). **6**
230 VAC[2] (with control p.c.b. only). **8**

[1] Note: Standard 12 and 24 VDC pump models for mobile applications can be supplied with 10-meter (30') electrical cable.
[2] Note: Standard 120 and 230 VAC pump models for industry are supplied without electrical cable.

Reservoir with and/or without Low-Level Control
1 L reservoir without low-level control (monitored by "Er" malfunction) . . **0**

Number of Possible Connections
- 1A = connection left-side (square-type), supply voltage **0**
- 2A = 2 connections (square-type)
  1 connection left-side, supply voltage. **1**
  1 connection right-side, low-level control or fault indication
  1A = 1 connection (quarter-turn type) supply voltage;
  low-level control or fault indication (DC models only). **2**

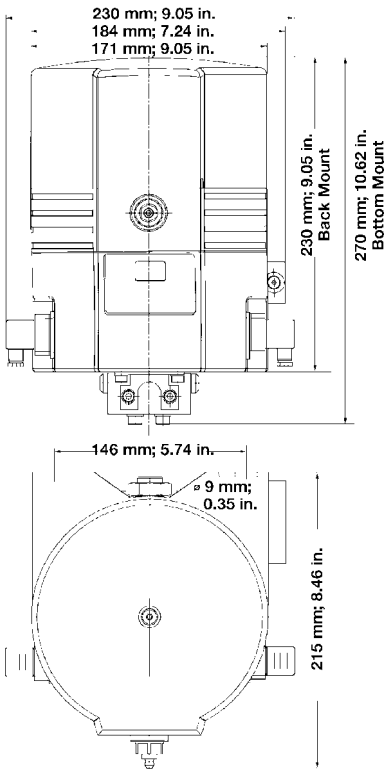
Type of Plug Connector
* Square-type, acc. to DIN 43650 type of construction A **1**
(industrial application)
** Quarter-turn type plug, DIN 72585-1, 4-pole
(mobile application; DC models only) **5**

Electrical Connectors
With socket, without cable * **1**
With socket, with cable 10 m **5**
With socket, with cable 10 m (DC models only) ** **7**

Control p. c. b.
p. c. b. without time control (DC models) **0**
p. c. b. S3:
Normally closed or normally open contact (programmable),
monitored:1 to 5 cycles (DC models) **3**
1 cycle with SSV 12, SSV 18 (AC models)
1 to 3 cycles with SSV 6, SSV 8 (AC models). **3**

QLS 301

It's compact, rugged, easy to install and easy to use. It has a long list of standard features including built-in controller with LED display and keypad for easy programming, system cycle monitoring, a built-in low-level control and remote monitoring capability. For those who thought the reduced downtime and improved safety of automated lubrication were out of reach, and for those waiting for a cost-effective system for their smaller machinery, the reliable QLS 301 is the answer. It's automated lubrication "made easy."

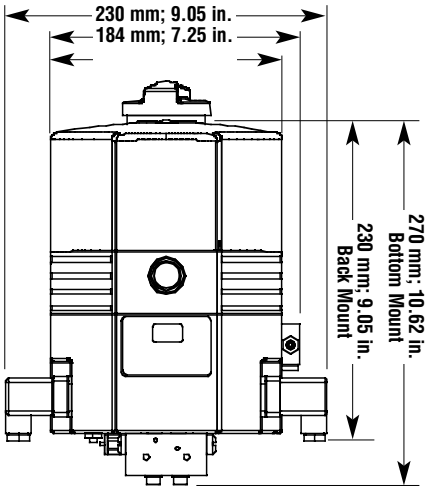


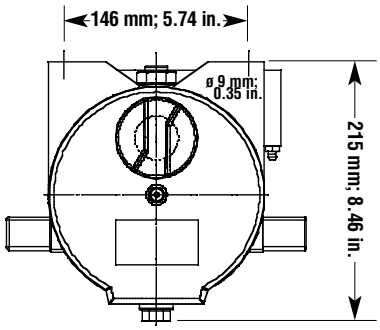
Operating Voltage:	12 and 24 VDC 120 and 230 VAC, 50/60 Hz
Operating Current:	12 VDC / 2.0 A 24 VDC / 1.0 A 120 VAC / 1.0 A 230 VAC / 0.5 A
Operating Temperature:	-10° to 158°F / -25° to 70°C
Number of Outlets:	6, 8, 12 or 18
Reservoir Capacity:	61 in^3 / 1.0 L
Protection:	NEMA 4
Lubrication Cycle Time:	20 min. to 59 hours
Number of Cycles:	For VDC: 1 to 5 cycles For VAC – SSV6/SSV8: 1 to 3 cycles For SSV12/SSV18: 1 cycle
Timer Memory:	Indefinite
Maximum Operating Pressure:	3000 psig / 205 bar
Output per Outlet & Cycle:	approx. 0.012 in^3 / approx. 0.2 cm^3
Lubricant:	NLGI 2 grease
Weight:	12.5 lbs. / 5.7 kg

Model Specifications

Model No.	Valve Type	Valve Mount	Volt	Cable
P301 31211153	SSV6	Back	12 DC	30' / 10m
P301 31411153	SSV6	Back	24 DC	30' / 10m
P301 42611113	SSV8	Bottom	120 AC	none
P301 42811113	SSV8	Bottom	230 AC	none
P301 61211153	SSV12	Back	12 DC	30' / 10m
P301 61411153	SSV12	Back	24 DC	30' / 10m
P301 62611113	SSV12	Bottom	120 AC	none
P301 62811113	SSV12	Bottom	230 AC	none
P301 91211153	SSV18	Back	12 DC	30' / 10m
P301 91411153	SSV18	Back	24 DC	30' / 10m
P301 92611113	SSV18	Bottom	120 AC	none
P301 92811113	SSV18	Bottom	230 AC	none

Note: All models include low-level and remote contacts.





QLS 311

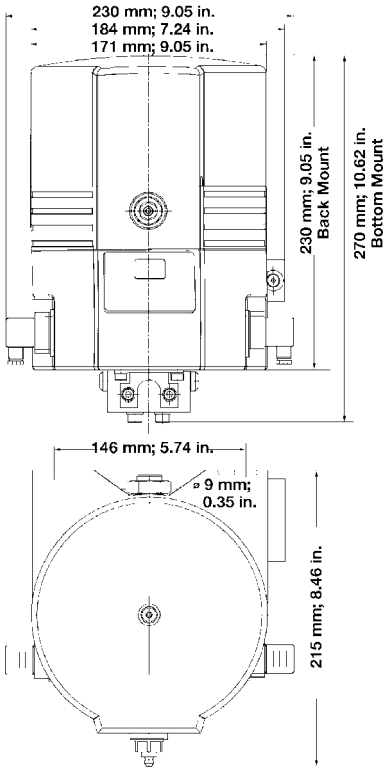
Unit includes pump, control monitor and metering valve and is ready to go "out of the box." Pump includes built-in controller with LED display and keypad for easy programming, system cycle monitoring, a built-in low-level control and remote monitoring capability. Unit offers the advantages of automated lubrication, including reduced downtime and improved safety, to machinery large and small.

Operating Voltage:	12 and 24 VDC 120 and 230 VAC; 50/60 Hz
Operating Current:	12 VDC / 2.0 A 24 VDC / 1.0 A 120 VAC / 1.0 A 230 VAC / 0.5 A
Operating Temperature:	-10° to 158°F / -25° to 70°C
Number of Outlets:	6, 8, 12 or 18
Reservoir Capacity:	61 in^3 / 1.0 L
Protection:	NEMA 4
Lubrication Cycle Time:	20 min. to 59 hours
Number of Cycles:	For VDC: 1 to 5 cycles For VAC – SSV6/SSV8: 1 to 3 cycles For SSV12/SSV18: 1 cycle
Timer Memory:	Indefinite
Max. Operating Pressure:	3000 psig / 205 bar
Output per Outlet & Cycle:	approx. 0.012 in^3 / approx. 0.2 cm^3
Lubricant:	oil
Weight:	12.5 lbs. / 5.7 kg

Model Specifications

Model No.	Valve Type	Valve Mount	Volt	Cable
P311 31211153	SSV6	Back	12 DC	30' / 10m
P311 61211153	SSV12	Back	12 DC	30' / 10m
P311 91211153	SSV18	Back	12 DC	30' / 10m
P311 31411153	SSV6	Back	24 DC	30' / 10m
P311 61411153	SSV12	Back	24 DC	30' / 10m
P311 91411153	SSV18	Back	24 DC	30' / 10m
P311 42611113	SSV8	Bottom	120 AC	none
P311 42811113	SSV8	Bottom	230 AC	none
P311 62611113	SSV12	Bottom	120 AC	none
P311 92611113	SSV18	Bottom	120 AC	none
P311 62811113	SSV12	Bottom	230 AC	none
P311 92811113	SSV18	Bottom	230 AC	none

Note: All models come with a low-level indicator and remote contacts.



QLS 301/311 for Remote Control

The QLS 301/311 for Remote Control allows customers to be in control of the lubrication process. The 24 VDC models monitor system cycling with a proximity switch. An external timer or PLC controls the interval between lube cycles. The 120 VAC models have no cycle monitoring and are on/off controlled by the user's external timer or PLC. The minimum pause time requirements should be followed when setting up the external controller.

Operating Voltage:	24 VDC 120 VAC, 50/60 Hz
Operating Current:	24 VDC / 1.0 A 120 VAC / 1.0 A
Operating Temperature:	-10° to 158°F / -25° to 70°C
Number of Outlets:	6, 8, 12 or 18
Reservoir Capacity:	61 in^3 / 1.0 L
Protection:	NEMA 4
Minimum Pause Time:	4 min. DC models / 20 min. AC models
Maximum Operating Time:	25 min. DC models / 15 min. AC models
Timer Memory:	Indefinite
Maximum Operating Pressure:	
Grease:	3000 psig / 205 bar
Oil:	1200 psi / 80 bar
Output per Outlet & Cycle:	approx. 0.012 in^3 / approx. 0.2 cm^3
Lubricant:	up to NLGI 2 grease or oil
Weight:	12.5 lbs. / 5.7 kg

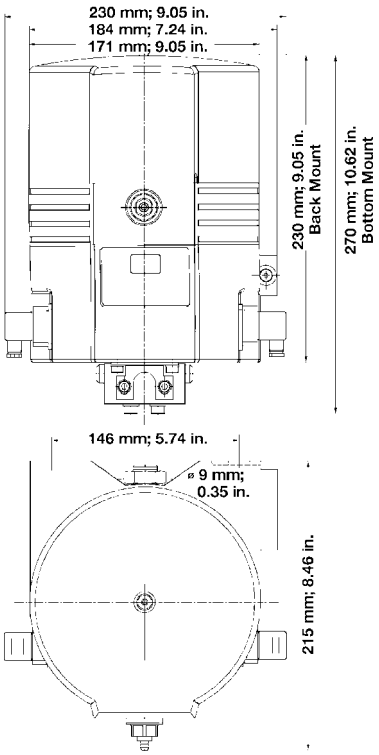
Model Specifications

Model No.	Valve Type	Valve Mount	Volt	Lubricant
P301 31411110	SSV6	Back	24 VDC	Grease
P301 61411110	SSV12	Back	24 VDC	Grease
P301 91411110	SSV18	Back	24 VDC	Grease
P311 31411110	SSV6	Back	24 VDC	Oil
P311 61411110	SSV12	Back	24 VDC	Oil
650-40768-3	SSV8	Bottom	120 VAC	Grease
650-40768-4	SSV12	Bottom	120 VAC	Grease
650-40768-5	SSV18	Bottom	120 VAC	Grease
650-40765-4	SSV8	Bottom	120 VAC	Oil
650-40765-5	SSV12	Bottom	120 VAC	Oil
650-40765-6	SSV18	Bottom	120 VAC	Oil

QLS 421/321

Accurate lubrication without the need for continuous power—that's what over-the-road trailers need. That's exactly what Lincoln's QLS 421/321 supplies. With a unique controller card that keeps track of the time a trailer is in use by monitoring its vibration, the QLS 421/321 delivers the precise lubrication an OTR trailer requires exactly when it's needed—by using the power of the trailer's brake lights.

Because it doesn't need power to monitor the time between lubrication events, the QLS 421/321 is ready when its controller card says "go." And the QLS 421/321 keeps lubricating each time the trailer's brakes are applied until its controller card adds up the "on times" and determines that the pre-set time for a complete lubrication cycle has been reached. The QLS 421 features an enhanced stirring paddle to help prevent grease separation in applications with long refill intervals.



Operating Voltage:	12 and 24 VDC
Operating Current:	12 VDC / 2.0 A 24 VDC / 1.0 A
Operating Temperature:	-10° to 158°F / -25° to 70°C
Number of Outlets:	6, 12 or 18
Reservoir Capacity:	61 in^3 / 1.0 L
Protection:	NEMA 4
Time Between Cycles:	1 hour to 16 hours
On Time Range:	1 to 32 min.
Timer Memory:	Indefinite
Maximum Operating Pressure:	3000 psig / 205 bar
Output per Outlet per Valve Cycle:	approx. 0.012 in^3 / approx. 0.2 cm^3
Lubricant:	up to NLGI 2 grease
Weight:	12.5 lbs. / 5.7 kg

Model Specifications

Model No.	Voltage	Valve Type	Valve Mount	Cable
P421 31402531	24 VDC	SSV6	Bottom	19 feet 6 meters
P421 61202531	12 VDC	SSV12		
P421 91202531	12 VDC	SSV18		
P421 91402531	24 VDC	SSV18		
P321 31210531	12 VDC	SSV6		
P321 31410531	24 VDC	SSV6		
P321 61210531	12 VDC	SSV12		
P321 91210531	12 VDC	SSV18		
P321 91410531	24 VDC	SSV18		

HTL Hydraulic Lubricator Pump for Hammers

- Delivers precise lubrication every time the hammer cycles
- Increase productivity—no work interruption
- Reduces machine repairs and replacement costs

Arms and breakers move constantly and exert enough force to demolish a building or repair roads in a tough environment filled with grit and debris. OEMs recommend bearing lubrication of that hammer every two hours to achieve optimal performance and to hold down maintenance and repair costs. However, deadline-driven operators rarely halt work to grease the hammer, which can lead to breakdowns that grind down productivity and inflate repair expenses. Lincoln's HTL Pumps make precise, consistent lubrication a reality. Now your operator can lubricate the hammer without leaving the cab. The pumps attach directly to the hammer, and your operator, with the push of a pedal, automatically sends a single shot of hydraulic fluid to the pump. Then the pump gives one shot of grease to lubricate the bearing points. When the operator's foot comes off the pedal, pressure releases the spring in the pump so it's ready to lubricate again.

Applications: construction OEMs, hydraulic hammer retrofits, demolition attachments and medium to larger breakers/hammers

- Withstands vibrations of an operating hammer
- Travels with hammer, perfect for rental equipment or hammers used on various machines
- Hydraulic power supply
- Pedal-actuated
- Attached grease fitting allows for manual filling and fast priming of pump
- Uses standard 14.5-ounce grease cartridges and handles chisel paste
- To adjust output, metering plugs are available (0.006 in^3 [0.1cm^3] to 0.031 in^3 [0.5cm^3])
- Convenient visual low level indicator

Model:	85429	85425
Hydraulic Ratio at Max. Output and Pressure*	2.4:1	0.7:1
Max. Hydraulic Operating Pressure:	3000 psig / 207 bar	5000 psig / 345 bar
Max. Recharge (or Vent) Pressure:	400 psig / 28 bar	1100 psig / 75 bar
Max. Lube Outlet Pressure:	6500 psig / 448 bar	
Output/Stroke (Std. Metering Plug):	0.018 in^3 / 0.3 cm^3 Std. 0.006 – 0.031 in^3 / 0.1 – 0.5 cm^3 Optional*	
Grease Reservoir Volume:	14.5 oz cartridge / 429 ml cartridge	
Operating Temperature:	-10°F to +180°F / -23°C to +80°C	
Hydraulic Port:	SAE #4 (7/16-20 UNF) O-ring	
Pump Outlet:	SAE #4 (7/16-20 UNF) O-ring	
Weight (Empty):	16.3 lbs. / 7.4 kg	
Weight (Full):	17.3 lbs. / 7.8 kg	

*Optional metering plugs are available for different output volume. See Pump Output Adjustment chart below.

Pump Output Adjustment

Metering Plug	Output per Stroke
271924	0.006 in^3 / 0.1 cm^3
271925	0.012 in^3 / 0.2 cm^3
271926*	0.018 in^3 / 0.3 cm^3
271927	0.031 in^3 / 0.5 cm^3

*Note: Standard plug included with pump

203 Pumps Designed for Hammer Applications

Model No.	Description	Low Level	Timer	Element	Reservoir	Voltage	Pressure Relief Valve
271374	P203-4XNBO-1C7-24-1A1.10	No	No	7mm Chisel	4L	24	Yes
272633	P203-4XLBO-1C7-24-2A1.10	Yes	No	7mm Chisel	4L	24	Yes
272643	P203-4XLBO-1C7-12-2A1.10	Yes	No	7mm Chisel	4L	12	Yes
273426	P203-4XLBO-1K5-24-2A1.10	Yes	No	5mm Std.	4L	24	Yes
272632	P203-8XLBO-1C7-24-2A1.10	Yes	No	7mm Chisel	8L	24	Yes
273422*	P203-8XLBO-2K7-24-2A1.10	Yes	No	2 x 7mm Std.	8L	24	Yes
273425	P203-8XLBO-1K7-24-2A1.10	Yes	No	7mm Std.	88L	24	Yes

* Pump comes with 272634 kit installed for double output.

203 Hammer Pump Accessories

Model No.	Description
272634	Double output kit
274149	Triple output kit
600-28750-1	7mm chisel paste element

203 Pump Accessories

Model No.	Description
270864	Standard pressure relief valve with 1/8" NPT supply line adapter
624-28894-1	Pressure relief valve 350-R 1/4" A-D6
624-28895-1	Pressure relief valve 350-R 1/4" A-D8
624-28931-1	Return to reservoir pressure relief valve

Note: The 1/8" NPT supply line adapter (part #304-19614-1) is included only with Model 270864 and must be ordered separately if required for other relief assembly models.

Quicklinc Push-In Style Fittings for Nylon Tubing

Model No.	Description
244053	1/4" tube x 1/4"-28 male 90° swivel fitting

Pump Elements

Model No.	Piston Diameter	Lubricant Output	Max. Operating Pressure	Connection Thread
600-26875-2	5 mm	.122 in^3/min / 2 cm^3/min	5000 psi 350 bar	G 1/4"
600-26876-2	6 mm	.171 in^3/min / 2.8 cm^3/min		
600-26877-2	7 mm	.244 in^3/min / 4 cm^3/min		
*600-28750-1				
**655-28716-1	7 mm	.04 in^3/min to .18 in^3/min .7 cm^3/min to 3 cm^3/min		

* Special hammer paste element for electric grease pumps to be used for applications on hydraulic hammers.

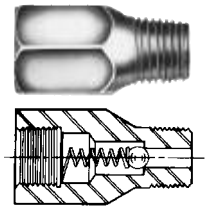
** Adjustable lubricant output pump element.

203 and QLS 300/400 Series Accessories
Pump Reservoir Conversion Kits & Accessories

Model No.	Description
544-32022-1	4-liter conversion kit (203 only w/o low-level)
544-32023-1	8-liter conversion kit (203 only w/o low-level)
226-14105-5	Outlet adapter for 4- and 8-liter pump models (pressure relief)
638-37549-1	Manual grease filler pump—2-liter
638-37549-2	Manual grease filler pump—4- and 8-liter
246322	Remote push-button manual lube kit for pumps with square DIN connectors (field replacement only)
256276	Remote push-button manual lube kit for pumps with bayonet round connectors
241419	12 VDC illuminated manual switch
241484	24 VDC illuminated manual switch
304-19614-1	1/8" NPT female supply line adapter
273921	Universal quickfill adapter for 2-, 4- and 8-liter pumps
538-36763-5	Fill adapter for 4- and 8-liter pumps
538-36763-1	Fill adapter for 2-liter pumps

Accessory Kits for QLS 300/400 Series Pumps

Description	6/8 Outlets 550-36971-1 Quantity	12 Outlets 550-36971-2 Quantity	18 Outlets 550-36971-3 Quantity
SSV Quicklinc outlet fitting with check	8	12	18
Quicklinc straight fitting	8	12	18
Zerk-Lock fitting	8	12	18
Zerk-Lock staking tool	1	1	1
1/4" nylon tubing	50 feet	150 feet	150 feet
Closure plug	4	4	4



Ball Type, Straight Check Valves for QLS 311

Add a check valve to the end of each feed lines (or at lube points) to prevent lines from siphoning.

Model No.	Pressure		Inlet	Outlet	Hex Material	Hex in.	Length in. / mm
	Max	Opening					
87817	7500 psig	20-70 psig	1/4" NPTF(M)	1/4" NPSF(F)	Carbon Steel	11/16"	1.38 / 35.1
87818	500 bar	1.5-5 bar	1/8" NPTF(M)	1/8" NPTF(F)		9/16"	1.19 / 30.2

Quicklub® Lubrication Systems
Installation Components

Lubricant flows through supply lines between the pump and divider valves, then through feed lines between the divider valves and the bearing. Tubing and/or pipe sizes are determined after considering both the length of the line and the specific lubricant intended for use in the system.

Your Lincoln representative can assist you in the proper selection of supply and feed line material to optimize your application.

Listed below is a simplified outline of the installation components offered. For a complete listing of products, please refer to the pages in this catalog entitled Fittings, Adapters and Accessories. Additional installation componentry can be found in the Installation Components Catalog.

TUBING

- Hydraulic, Steel, Stainless Steel and Nylon
- Single and Multiple Tube Clamps
- Heavy-Duty, Standard-Duty, Threaded Sleeve and Snap-On Coupler Tube Fittings
- Quicklinc™ Tubing Adapter
- Zerk-Lock™ Grease Fitting Adapters
- Non-Metallic

PIPING

- Seamless
- Continuous Welded
- Forged Fittings
- Malleable Iron Fittings
- 316 Stainless Steel Pipe and Fittings
- Stainless Steel Fittings
- Galvanized Pipe, Threaded Plug and Fittings

ACCESSORIES

- Supply, Feed and Bulk Feed Line Hose
- Air Hose
- Kits for Hose Repair
- Heavy-Duty Air Line Quick Disconnects

AIR CONTROL AND ACCESSORIES

- Manual Shut-Off Valves
- Pressure Gauges
- Lubricant Filters and Strainers

AIRCARE™ AIR PREPARATION SYSTEMS

- Modular Air Line Filters, Regulators and Lubricators
- Integrated/Modular Filter/Regulator with Gauge
- Modular Air Line Combination Units
- High-Capacity Air Line Filters, Regulators and Lubricators
- High-Capacity Air Line Combination Units
- Miniature Air Line Components—Air Line Filter, Regulator and Lubricator
- Miniature Air Line Combination Units
- Modular Air Line Equipment Accessories: Lockout Valve, Quick Clamp, Quick Clamp Wall Mounting Bracket, Porting Block, Quick Mount Pipe Adaptors, Manifold Block, Pressure Switch, Panel Nut, Wall Mount Bracket, Tamper Resistant Cover and Seal Wire
- Air Line Equipment Accessories: Wall Mount Bracket, High Capacity; Mounting Bracket and Nut, Miniature; Pressure Gauges

PIPE FITTINGS

- Reducing Bushings
- Nipples
- Couplings
- Reducing Couplings
- Street Ells
- Tees
- Crosses
- Adapter Unions
- Elbows
- Pipe Fitting Adapters
- Supply Line Swivels
- Feed Line Swivels
- Anchor and Junction Blocks

Divider Valve Mounting Accessories

Model No.	Description
246416	Valve mounting bracket
51304	¼" nylon locknut for valve mounting
247023	Grade 8, ¼" valve mounting bolt
239499	Template for divider valve mounting (6, 8, 10 and 12 outlet valves)
252807	Valve mounting block for welding
249987	6mm bolt to be used with the 252807

Standard Compression Fittings for Steel or Nylon Tubing

Model No.	Description
241290	¼" tube x ⅛" NPT male straight fitting
241293	¼" tube x ⅛" NPT male 90° fitting

Divider Valve Outlet Adapters for ¼" O.D. Steel or Nylon Tubing Compression-Style With Check Valve

Model No.	Description
68462	Ferrule ¼"
404-22602-1	Compression nut
504-31606-3	Check valve body
404-22581-2	Clamping ring

Divider Valve Outlet Adapters for ¼" O.D. Steel or Nylon Tubing Compression-Style Without Check Valve

Model No.	Description
404-20236-4	Compression nut
404-23668-1	Compression nut (stainless steel)
404-22581-2	Ferrule

Divider Valve Outlet Adapters for ⅛" I.D. Hose

Model No.	Description
404-22581-2	Clamping ring
239857	Valve outlet adapter with check (⅛" NPT female)
239959	Valve outlet adapter without check (⅛" NPT female)

For SSVM Valves—Compression Fitting

Model No.	Description	Material	Feed Line Connection
13112	Compression nut	Brass	⅛" Steel or Nylon Tube
419-22990-1	Adapter		
419-22618-2	Ferrule		
519-30583-1	Check valve body		

NOTE: Quicklub® adapters without check valves are for use in manual systems where lubricant is supplied from hand grease guns or pneumatic powered lever guns. Quicklub® adapters with check valves are for use in all automated systems.

Zerk-Lock™ and Quicklinc® Make Connecting Fast

Quicklinc line connectors and adapters link metering valves and flexible lubrication lines. Outlet adapters with check valves are used in automated systems, while models without a check valve are used in manual systems—called single point kits—where a divider valve connected to several lubrication points is fed with a grease gun.

The Quicklinc tube splicer union is a great way to fix a broken line without replacing the whole line. Just clean the line ends, plug them into the connector and the line's repaired.

Quicklinc lube point connectors are ideal when fittings can be removed easily. All three varieties—straight, 90-degree elbow and elbow swivel—connect much faster than using a typical screw connector, which requires assembly of four components.

Zerk-Lock is Lincoln's other great time-saving connector. When removing a fitting is not practical, the Zerk-Lock grease fitting adapter is the answer. It connects any ⅛-inch male tube adapter directly to a grease fitting. Even when a fitting is self-tapered or pressed in, there's no need to drill it out and tap new threads with Zerk-Lock—a tremendous time saving.

Quicklinc and Zerk-Lock are designed to work well together. It's as simple as:

1. Install a Quicklinc into the divider valve and insert the line

2. Place a Zerk-Lock onto the fitting

3. Seal and tighten Zerk-Lock using a hammer and staking tool

4. Then thread a Quicklinc completely into the Zerk-Lock

5. And plug the tube into the Quicklinc adapter

Quicklinc Push-In Style Fittings for Nylon Tubing

Model No.	Description
244047	¼" tube x ⅛" NPT male straight fitting
244048	¼" tube x ⅛" NPT male 90° fitting
243699	¼" tube x ⅛" NPT male 90° swivel fitting
244053	¼" tube x ¼" -28 male 90° swivel fitting
244054	¼" tube x ¼ - 28 male 90° fitting
244055	¼" tube x ¼ - 28 male straight fitting
244056	¼" tube x 6 mm male 90° fitting
244057	¼" tube x 6 mm straight fitting
244058	¼" tube x ¼" tube splicer union

Divider Valve Outlet Adapters for ¼" O.D. Nylon Tubing Quicklinc Push-In Style

Model No.	Description
244883	Valve outlet fitting with check
244884	Valve outlet fitting without check

Divider Valve Outlet & Inlet Adapters for ⅛" I.D. Hose Quicklinc Push-In Style with Check

Model No.	Description
272658	Valve outlet fitting with check
272659	¼" tube x ⅛" NPT male straight fitting

IMPORTANT: Use the valve adapters for connecting the ⅛" high pressure hose (incl. hose stud with groove) to the main divider valve. The collet of the adapter is not knurled and has a wide collar.

Model No.	Description
432-24313-1	Protective Quicklinc rubber boot

Divider Valve Outlet Closure Plug

Model No.	Description
303-17499-3	Valve outlet closure plug (gasket not required)
303-19346-2	Stainless steel outlet closure plug (gasket not required)

⅛" Supply and Feed Line Hose

Min. Burst	Lube Working Pressure	Nominal Size		Minimum Bending Radius	Construction
		I.D.	O.D.		
10,000 psig 690 bar	4000 psig 276 bar	⅛"	5⁄16"	3½"	Nylon Tube Dacron Braid Polyurethane Cover

Model No.	Description
241286	26 ft. (7.92m) coil grease filled
241287	35 ft. (10.66m) coil grease filled
241288	40 ft. (12.19m) coil grease filled
252717	200 ft (60.96m) coil non-grease filled

Hose Ends for Use with Quicklinc Fittings

Model No.	Description
272394	Hose stud, 90° (to be used with 272427)
272401	Hose stud, straight (to be used with 272427)
272427	Threaded sleeve
274238	Stainless steel hose stud sleeve
274239	Stainless steel straight hose

Hose Ends for ⅛" I.D. Hose

Model No.	Description
241289	⅛" NPT swedge on hose stud (requires swedging tool)
246002	⅛" NPT field installable hose coupling (swedging tool not required)

Hose End Connecting Tools

Model No.	Description
241238	Swedge tool for field installation of Model 241289
274062	Hand vise for quick connect and reusable hose ends

Feed Line Nylon Tubing

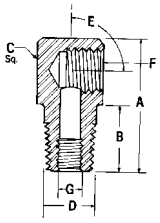
O.D. Inches	Wall Thickness in. / mm	Working Pressure		Minimum Bending in. / mm
		psig	bar	
¼"	.050 / 1.27	625	42.5	.875 / 22.2

Model No.	Description
242025	25 ft. (7.62m) coil grease filled
242050	50 ft. (15.24m) coil grease filled
62357	100 ft. (30.48m) coil non-grease filled
247022	500 ft. (152.40m) coil non-grease filled

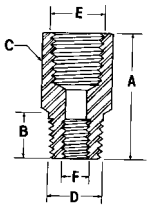
O.D. Inches	Wall Thickness in. / mm	Working Pressure		Minimum Bending in. / mm
		psig	bar	
¼"	.062 / 1.575	500	34.5	0.5 / 12.7

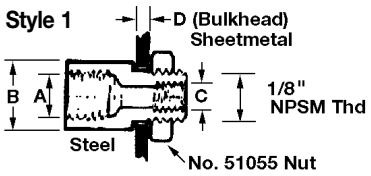
Model No.	Description
274047	25 ft. (7.62m) coil grease filled
274048	50 ft. (15.24m) coil grease filled
274049	100 ft. (30.48m) coil non-grease filled
274050	500 ft. (152.40m) coil non-grease filled

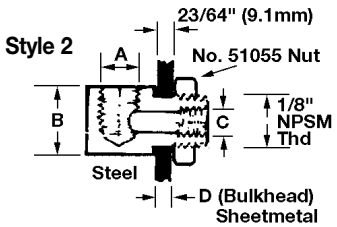

Style 1 Style 2




Style 3








No. 51055

Steel Tubing

Model No.	Size (O.D. x Wall)			Working Pressure	Type
	O.D.	Wall	Length		
62175	⅛"	.020"	25 ft/7.6 m	4400 psig/300 bar	Coil

Nylon Tubing

Model No.	Size (O.D. x Wall)			Working Pressure	Min. Bend Radius
	O.D.	Wall	Length		
62256	⅛"	.026"	25 ft/7.6 m	625 psig / 42.5 bar	.375"
62278			100 ft/30.5 m		
62956			500 ft/152 m		

Pipe Thread Adapters

Model No.	Style	A	B	C	D	E	F	G
13129	1	1½	⅞	⅝	⅛ NPTF	90°	⅛ NPTF	
20024	3	⅞	5/16	½ hex	¼-28 Taper	⅛ NPSF		
20026	1	13/16	5/16	½ sq.	¼-28 Taper	90°	⅛ PTF	
20028	2	1	15/32	½ sq.	⅛ PTF	45°	⅛ PTF	
20029	1	1	15/32	½ sq.	⅛ PTF	90°	⅛ PTF	
247616	2	1	17/32	½	¼-28 Taper	45°	⅛ NPTF	

Bulkhead Adapters

Model No.	Style	A	B	C	D
13154	1	⅛" PTF	½"	¼" -28	3/16"
14054	1	⅛" PTF	½"	¼" -28	3/16"
13155	2	⅛" PTF	½"	¼" -28	3/16"

51055	Lock Nut ⅛" NPSM thread

Fittings, Adapters and Installation Accessories

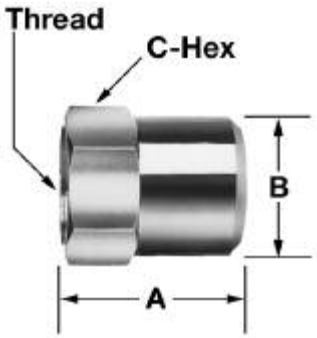
Model No.	Description
10130	⅛" NPT male x ⅛" NPT male nipple
10181	⅛" NPT male x ⅛" NPT female adapter, 1⅞" long
10182	⅛" NPT male x ⅛" female adapter, 15/16" long
14562	2 outlet ⅛" NPT x ⅛" NPT junction block
14563	4 outlet ⅛" NPT x ⅛" NPT junction block
81583	Junction block, ⅛" NPT
14570	Anchor block
67448	Street tee, ⅛" NPT female run

Metric Adapters

Model No.	Description
20042	6 mm male x ⅛" NPSF female straight
20043	6 mm male x ⅛" NPSF female 90°
244201	⅛" BSPT male x ⅛" NPT female thread

Grease Fittings

Model No.	Description
5045	⅛" NPT threaded straight leakproof fitting
242125	Plastic grease fitting cap



Zerk-Lock™ Grease Fitting Adapter

Connects any ⅛" NPTF male tube adapter directly to a standard grease fitting. Aluminum, carbon steel construction; fluorocarbon elastomer seal.

Model No.	Thread	Dimensions					
		A		B		C-Hex	
		in.	mm	in.	mm	in.	mm
270784	⅛" NPSL Female	.625	15.9	.500	12.7	.500	12.7

Note:
Zerk-Lock, with a straight female thread, is designed to accept a tube connector with a tapered male thread. This tapered to straight thread engagement is required for secure seal.

Model No.	Description
247615	Staking tool for the 270784 Zerk Lock fitting

Swivels

Model No.	Description
91048	⅛" NPT male x ⅛" NPT female 90° swivel
91308	⅛" NPT male x ⅛" NPT female straight swivel

Street Tee

Model No.	Description
67448	⅛" NPT male x ⅛" NPT female x ⅛" NPT female

Adapter Unions and Locknuts

Model No.	Description
66649	⅛" NPT male x ⅛" NPT female swivel adapter union
51055	⅛" NPSM locknut utilized for remote ⅛" I.D. hose bulkhead connections

Installation/Assembly Tools

Model No.	Description
226-12508-5	Plastic tube and hose cutter (formerly 241237)
226-13095-7	Replacement blade for 226-12508-5
241238	Swedging tool for field installation of Model 241289
274062	Hand vise for quick connect and reusable hose stud installation

System Finishing Accessories

Model No.	Description
241110	Feed line bundling spiral wrap (10 ft./3m length)
241120	20 feet/6m of spiral wrap
241055	Nylon ties (50 count poly bag)
241054	Nylon ties (100 count poly bag)
274097	20 feet/6m of ⅜" split wrap
274098	20 feet/6m of ½" split wrap
274099	20 feet/6m of ⅝" split wrap

Pump Mounting Bracket and Hardware for 203 Series and QLS 300 & 400 Series Pumps

Model No.	Description
249520	Pump mounting bracket for 203/301/401 Series pumps
249209	12 mm x 1½" long grade 8 bolt for pump bracket

Stand Offs for Mounting SSV Valves, P-Clamps and Angle Iron

Model No.	Description
252807	Divider valve mounting block
249987	6mm bolt to be used with the 252807
249850	12mm round stand off
270928	12mm square stand off
249848	12mm x ⅝" long bolt to be used with 249850 and 270928
249851	10mm round stand off
249849	10mm x ⅝" long bolt to be used with 249851

These kits are designed to service up to 12 points from a single grease fitting utilizing our 12-point SSV series divider valve. The kits, which are available with or without a grease gun, include all componentry required to install the system. Kits are available primed with NLGI #2 grease or non-filled if a specific grade or type of grease is to be used.

These kits effectively replace the concept of using grease fittings mounted to a central manifold with a system that delivers precise amounts of lubricant, fully monitored with the divider valve's indicator pin. Kits include 100' ¼" nylon tubing, 12 straight Quicklinc® tube fittings, 12 Zerk-Lock™ adapters, mounting clips and hardware.

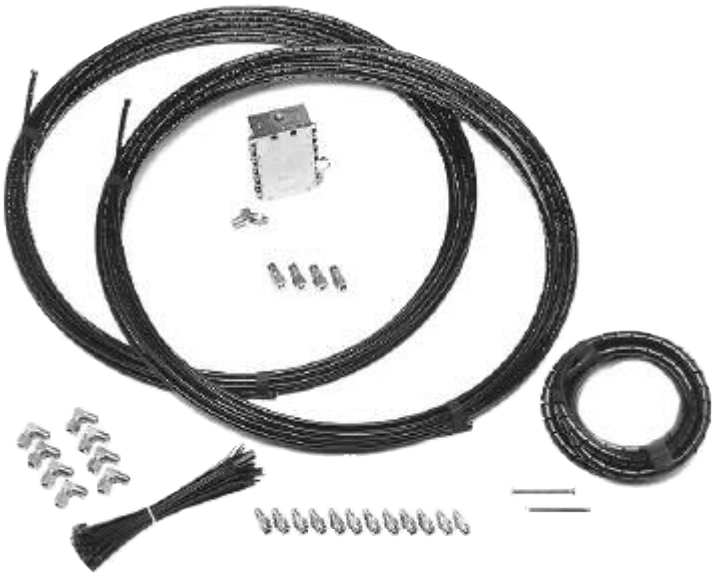
Quicklub Centralized Lubrication Kits

Single point kits contain all items required to install a system on your machinery, including a complete installation/service manual. The selection chart describes the models available to meet your specific needs.

Model No.	Selection Chart Description	Tubing
87311	Kit with single fitting for use with portable grease gun.	Non-filled
87312		Pre-filled
87411	Complete kit with grease gun for permanent mounting.	Non-filled
87412		Pre-filled

Trailer Kits—Unassembled

Model No.	Description
239406	6-point manual QL kit
239408	8-point manual QL kit
239410	10-point manual QL kit
239412	12-point manual QL kit
239418	18-point manual QL kit



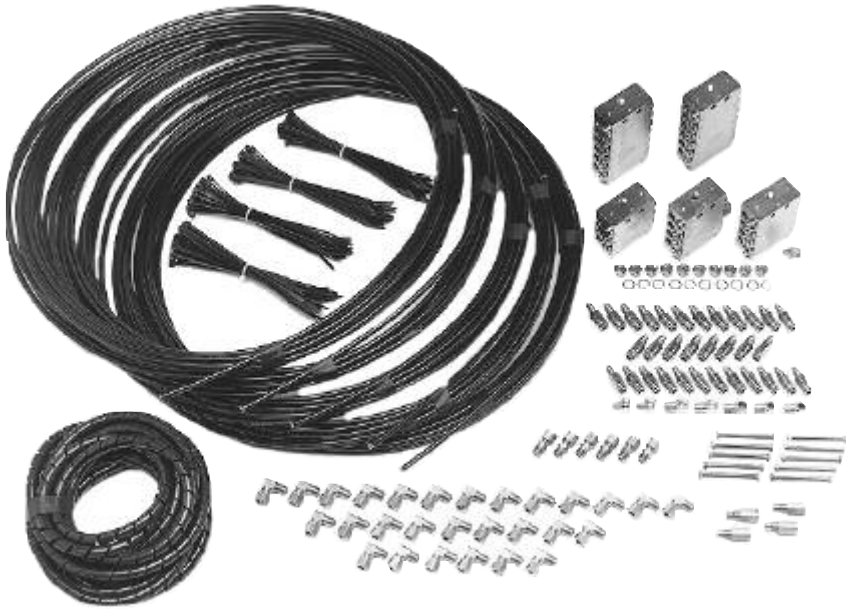
Trailer Kits—Preassembled

Model No.	Description
244506	6-point manual QL kit—single axle
244512	12-point manual QL kit—tandem axle

Note: Above referenced kits require purchase of electric grease pump (see Pump section of this catalog) when fully automated system is desired.

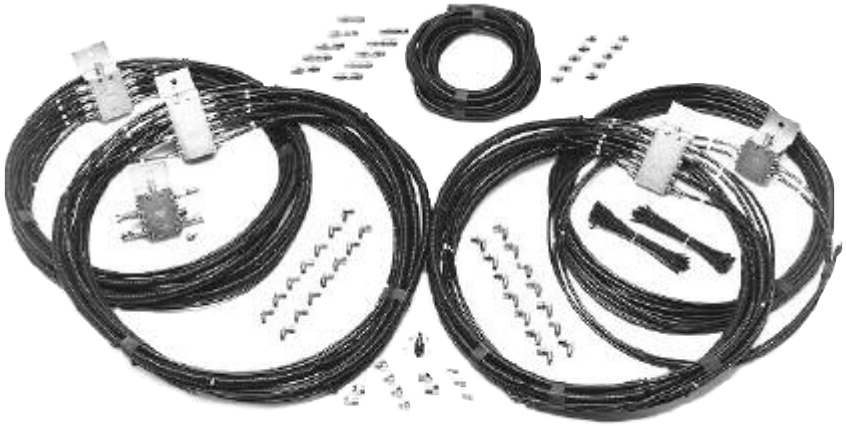
Tractor/Truck Kits
Unassembled Kits

Description	Manual Kits	Automated Kits
16-point QL kit	241316	241116 (includes 241316 and 94012)
22-point QL kit	241322	241122 (includes 241322 and 94012)
24-point QL kit	241324	241124 (includes 241324 and 94012)
26-point QL kit	241326	241126 (includes 241326 and 94012)
28-point QL kit	241328	241128 (includes 241328 and 94012)
29-point QL kit	241329	241129 (includes 241329 and 94012)
32-point QL kit	241332	241132 (includes 241332 and 94012)
33-point QL kit	241333	241333 (includes 241333 and 94012)



Preassembled Manual Kits

Model No.	Description
247232	32-point manual preassembled kit



Note: Above referenced kits require purchase of electric grease pump (see Pump section of this catalog) when fully automated system is desired.

Quicklub® Lubrication Systems
Numerical Index

Quicklub® Lubrication Systems
Numerical Index

A Complete Line of Lubrication Solutions and Industrial Pumping Products

Automated Lubrication

Our automated systems dispense measured amounts of lubricant at predetermined intervals. Systems include Helios® and Duo-Matic™ two-line systems, and Centro-Matic®, Modular Lube®, Quicklub® and ORSCO precision oil lubrication. With our BearingSaver® program, we find the best automated solution for you from our wide range of systems for grease, fluid grease and oil.

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Sometimes a simple approach is the best solution. Our wide range of products includes smaller, self-contained automated lubricators and general lubrication equipment.

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Lincoln has developed specialized pumps and pumping stations to handle the difficult job of transferring thick fluids. From the industry-best PileDriver III® and PowerMaster III® pumps and air motors to specialty pumps, controls and mounting accessories, Lincoln is the preferred pumping system for many tough applications.

Lincoln's global distribution network is the best in the industry.

Whatever the service—evaluating your lubrication methods, installing a custom-engineered system or supplying top-quality manual lubrication products—your Lincoln distributor makes certain you always get the very best value.

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D-69190 Walldorf
Germany
49.6227.33.0
Fax: 49.6227.33.259

Asia/Pacific:

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65.6588.0188
Fax: 65.6588.3438

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Lincoln Industrial Corp.
One Lincoln Way
St. Louis, MO 63120-1578

Phone 314.679.4200
Fax 314.679.4359
www.lincolnindustrial.com

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