



**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.**

<b>Output/Min Per Element**:</b>	.171 cu. in. / 2.8 cc
<b>Lubricant Outlet:</b>	1/8" NPT (F)
<b>Max. System Operating Pressure:</b>	3600 psig / 248 bar
<b>Enclosure Rating:</b>	IP6K9K*
<b>Operating Temperature Range:</b>	Min. -13°F / -25°C Max. 158°F / 70°C
<b>Reservoir Fill Method:</b>	By grease fitting
<b>Pressure Relief Valve:</b>	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

**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
8						3.6	four	
16						7.2	eight	
94024	24 VDC 2 Amp	2 minutes	30 minutes	1 hour	15 hours	4	1.8	two
8						3.6	four	
16						7.2	eight	

**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 mins.	1 hour	15 hours	4	1.8	two
94224								
94212	12 VDC 3.5 Amps	Timer not included with Models 94224 and 94212. Select external timer from System Controls section						



### 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

<b>Input:</b>	12 VDC @ 3.5 amps, 24 VDC @ 2 amps 94 - 265 VAC (50 to 60 Hz)
<b>Enclosure Rating:</b>	IP6K9K *
<b>Alarm Time:</b>	30 minutes
<b>Interval between Lube Cycles:</b>	Min. 4 minutes / Max. 15 hours
<b>Pump Output:</b>	0.171 cu. in./min. / 2.8 cc/min.
<b>Outlet Connection:</b>	1/8" NPT (F)
<b>Maximum Recommended Operating Pressure:</b>	3600 psi / 248 bar
<b>Lubricant:</b>	Greases up to NLGI grade 2 (depending on operating temperature and type of lubricant)
<b>Temperature Range:</b>	-13°F to 158°F / -25°C to 70°C
<b>Pressure Relief Valve:</b>	4000 psi, +/- 250 / 276 bar, +/- 17

Note: Do not use pump without pressure relief valve. \* Protected from water sprayed in all directions.

### Model Specifications

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

\*These "644-" pumps do not come with the pressure relief valve. It must be 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-G 1/4" A-D6
624-28895-1	Pressure Relief Valve 350-G 1/4" A-D8

### 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
234-13178-2	AMP 3m (9.8') cable length	4 - AMP (exisitng field models)
234-13178-5	AMP 7m (23.0') cable length	4 - AMP (exisitng field models)

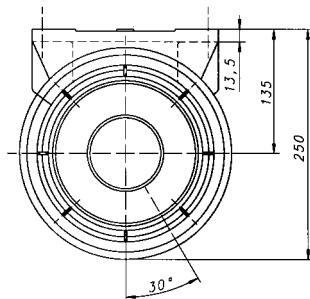
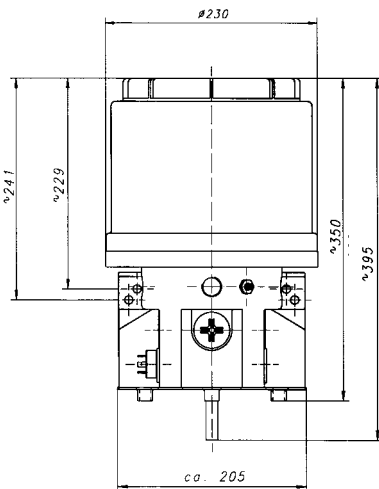




### 203 AC Models

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

<b>Input voltage:</b>	94 - 265 VAC
<b>Operating temperature:</b>	-13° to 158°F / -25° to 70°C
<b>Number and element size:</b>	1 - 6mm
<b>Reservoir capacity:</b>	2, 4 or 8 liter
<b>Output per minute:</b>	Approx. 2.8 cc / 0.171 cu. in. per min.
<b>Lubricant:</b>	Greases up to NGLI #2 Oil with at least 40 cSt
<b>On time with PC board:</b>	2 to 30 minutes
<b>Factory set on time:</b>	6 minutes
<b>Factory set pause time:</b>	6 hours
<b>Max. operating pressure:</b>	5000 psi / 350 bar
<b>Connection thread:</b>	G $\frac{1}{4}$ " for 6mm or 8mm diameter tube



### Model Specifications

Model No.	Description	Reservoir Capacity	Grease or Oil	Low level control	Printed circuit board
644-40716-2	P203-2XNBO-1K6-AC-1A1.01-V10	2 liter	Grease	No	Yes
644-40719-5	P203-4XNBO-1K6-AC-1A1.01-V10	4 liter	Grease	No	Yes
644-40719-6	P203-4YLBO-1K6-AC-1A1.01-V10	4 liter	Oil	Yes	Yes
644-40717-5	P203-2XNBO-1K6-AC-1A1.01	2 liter	Grease	No	No
644-40718-1	P203-4XLBO-1K6-AC-2A1.01	4 liter	Grease	Yes	No
644-40718-8	P203-4YLBO-1K6-AC-1A1.01	4 liter	Oil	Yes	No
644-40718-7	P203-4XNBO-1K6-AC-1A1.01	4 liter	Grease	No	No
644-40762-2	P203-8XLBO-1K6-AC-2A1.01-V10	8 liter	Grease	Yes	Yes

These pumps do not come with the pressure relief valve. It must be ordered separately.

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

The 1/8" NPT adapter (part #304-19614-1) is not included and must be ordered separately, if required.

# Quicklub® Lubrication Systems

## Identification Code—Pump Models 203



### Examples of Codes

#### 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 = 44 - 26.5 VAC (47 - 63 HZ) with 24 VDC motor

#### Number of Connection Possibilities

1A = 1 connector (left), power supply <sup>1</sup>

1A = 1 connector (left), power supply <sup>2</sup>

1A = 1 connector, power supply left + illuminated pushbutton for additional lubrication, low level <sup>3, c</sup>

2A = 2 connectors, power supply (left) <sup>1, +</sup> illuminated pushbutton for additional lubrication, low level (right) <sup>1, c</sup> (V10 - V13, V20 - V23, H)

2A = 2 connectors, power supply (left) + illuminated pushbutton for additional lubrication, low level (left) <sup>3, c</sup> and piston detector (right) <sup>4</sup> (M08 - M23)

#### Type of Connection

1 = square type connector (DIN 43650, type A) <sup>1</sup>

5 = bayonet plug, 4/3, DIN 72585-1 <sup>2</sup> (V10-V13, V20-V23, H)

6 = bajonet plug, 7/5, DIN 72585-13) (M08-M23)

7 = bayonet plug, 7/6, DIN 72585-1 <sup>3</sup> (V10-V13, V20-V23)

#### Connection Outside the Pump

00 = without socket outlet, without cable

01 = socket outlet, without cable <sup>1</sup>

10 = socket outlet, with 10 m cable <sup>1</sup>

11 = socket outlet, with 10 m ADR cable <sup>A, 1</sup>

14 = socket for bayonet, with 10 m cable, 4/3 <sup>2</sup>, V10-V13, V 20-V23, no low level, no illuminated pushbutton <sup>c</sup>

15 = socket for bayonet with 10 m cable, 7/5 <sup>3</sup>, M08-M23

16 = socket for bayonet, with 10 m cable, 7/6g <sup>3</sup>, V10-V13, V 20-V23, with low level or illuminated pushbutton <sup>c</sup>

17 = socket for bayonet with 10 m ADR-Cable <sup>A</sup>, 4/3 <sup>2</sup>, (V10-V13, H)

#### P.C.B. for 12 / 24 VDC

V10 - V13 = adjustable pause and operating time <sup>1, 2, 3</sup>

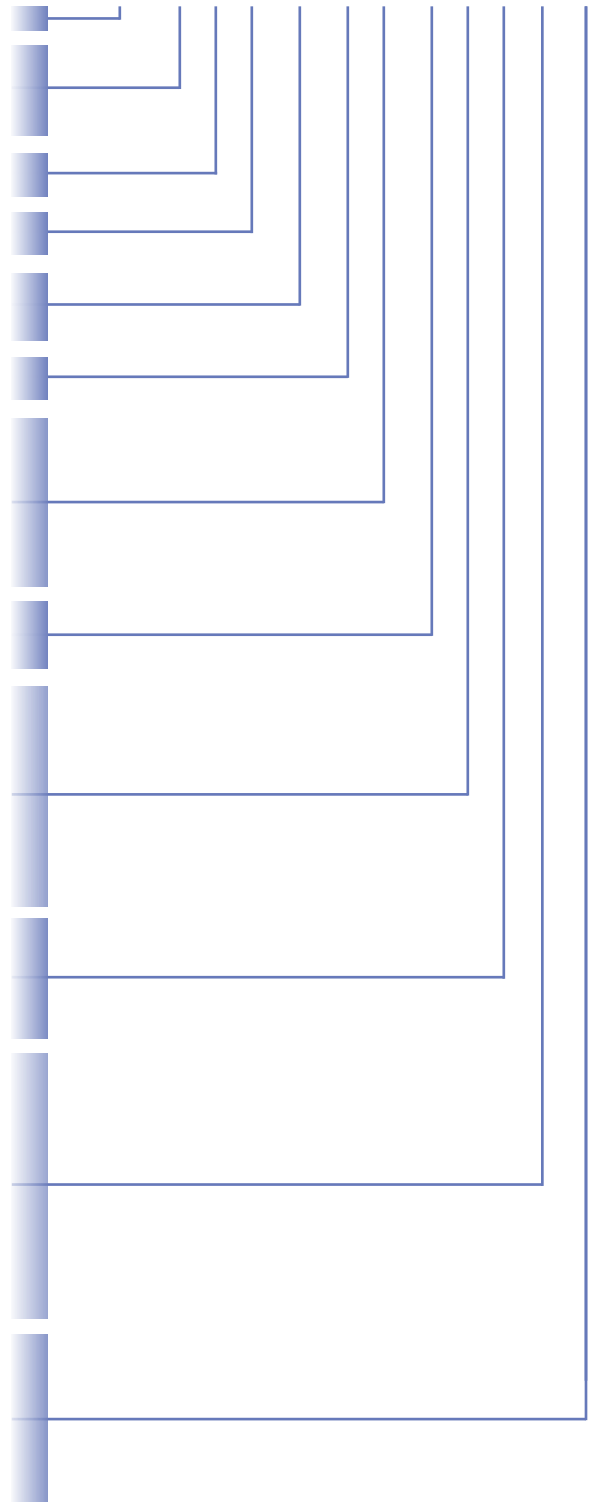
H = for trailers and semi trailers <sup>1, 2</sup>

without designation = without p.c.b. <sup>1, 2</sup>

M08 - M23 = with microprocessor control <sup>3</sup> different model in accordance to the jumper position

No designation, pump without control p.c.b.

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



The Figures <sup>1, 2, 3</sup> are in conjunction with those of the "Type of connection" determining the connector you could use

<sup>A</sup> For hazardous material transport

<sup>B</sup> C7 = for supply of chisel paste

<sup>c</sup> 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 3 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 <sup>3</sup>	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	12VDC	2	122	4			
644-40869-1	P233-4XLBO-1K6-12-2A5.10-MDF00-A	12VDC	4	244	8			
644-40870-1	P233-8XLBO-1K6-12-2A5.10-MDF00-A	12VDC	8	488	16			
644-40867-1	P233-8XLBO-1K6-AC-2A6.15-MDF00	120VAC	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