

## 02 AIR OPERATED GREASE PUMPS AND KITS

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## AIR OPERATED GREASE PUMPS

SAMSON offers a range of high pressure and high delivery grease pumps to handle a wide variety of applications. This pump offering fits original container sizes, from small pails to drums, totes and speciality built tanks, and covers applications from portable units to large distribution systems.

SAMSON's grease pumps are designed to provide years of dependable service. The in-line balanced design assures maximum pump efficiency. All SAMSON pumps have a double acting design, pumping product on both the upstroke and downstroke. An effective priming piston provides positive priming, even when used with high viscosity or tacky greases. A hardened foot valve minimizes pump damage due to dirt. A corrosion proof air motor design tolerates moisture in compressed air.

**PUMP MASTER®**



**PM 35 HEAVY-DUTY  
SERIES**

**PM3 UTILITY PUMP  
SERIES**



	PUMPMASTER 3 - 55:1	PUMPMASTER 35 - 60:1
<b>PUMP DESCRIPTION</b>	Utility high pressure	Heavy-Duty high pressure
<b>SIMULTANEOUS OPERATION OUTLETS</b>	1 No reels - mobile units	1 to 2
<b>MAX. LINE LENGTH</b>	50' - 15 m	250' - 75 m
<b>APPLICATION</b>	Agriculture Service shops Light Industrial	Heavy-Duty service shops Fleets Lube trucks Mining and construction In-plant Railroad and mass transit

Maximum line length and number of simultaneous dispense points also depends on the line diameter, fluid viscosity and required delivery.


**PM45 HEAVY-DUTY  
SERIES**

**PM60 HEAVY-DUTY  
SERIES**


<b>PUMPMaster 45 - 25:1</b>	<b>PUMPMaster 45 - 40:1</b>	<b>PUMPMaster 45 - 70:1</b>	<b>PUMPMaster 60 - 12:1</b>	<b>PUMPMaster 60 - 80:1</b>
Heavy-Duty pressure transfer	Heavy-Duty high flow	Heavy-Duty high pressure	Heavy-Duty volume transfer	Heavy-Duty high performance
1 No reels - mobile units	4 or more	4 or more	1	4 or more
250' - 75 m	400' - 125 m	600' - 175 m	175' - 50 m	800' - 250 m
Moderate pressure transfer Lube trucks Mining and construction In-plant	Heavy-Duty service shops Fleets Lube trucks Mining and construction Railroad and mass transit In-plant Marine	Heavy-Duty service shops Fleets Lube trucks Mining and construction Railroad and mass transit In-plant Marine	Low pressure, high volume transfer Mining and construction In-plant Railroad and mass transit	Fleets Lube trucks Mining and construction Railroad and mass transit In-plant Marine

Maximum line length and number of simultaneous dispense points also depends on the line diameter, fluid viscosity and required delivery.

Product specifications are subject to change without prior notice



Light weight and effective double acting high pressure air operated pumps specially designed for use in mobile and portable greasing units.

Pumps are available with three different suction tube lengths, to fit all commercial grease drums: 35 lb (20 kg), 120 lb (50 kg) and 400 lb (185 kg). They include a height adjustable 2" NPTM bung adaptor.

## FLUIDS HANDLED

- Grease up to NLGI-2.

## MARKETS SERVED

- Agriculture.
- Service shops.
- Light industrial.

## MODELS

PART No.	APPLICATION	WEIGHT
300	35 lb (20 kg) pail with bung adaptor	8 lb (3,5 kg)
302	120 lb (50 kg) keg with bung adaptor	9.5 lb (4,3 kg)
304	400 lb (185 kg) drum with bung adaptor	10.6 lb (4,8 kg)

## TECHNICAL DATA

Pump ratio	55:1
Air pressure operating range	20 to 140 psi (1,5 to 10 bar)
Air consumption (1)	5.8 scfm (165 NL/min)
Maximum fluid outlet pressure	7,700 psi (550 bar)
Air motor diameter	2 3/4" (70 mm)
Air motor stroke	1 1/2" (35 mm)
Delivery at 110 cpm	0.7 lb/min (300 g/min)
Maximum free flow delivery (2)	1.2 lb/min (540 g/min)
Air inlet	1/4" NPTF
Fluid outlet	1/4" NPTF
Wetted and seal materials	Steel / NBR / PTFE
Noise level (3)	85 dB
Manual	840 803

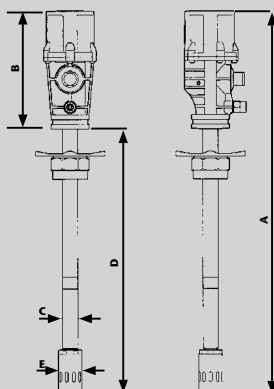
(1) Maximum air consumption with 90 psi (6 bar) air inlet pressure, NLGI-2 grease at 68 °F (20 °C) and 110 cpm.

(2) Maximum free delivery at 100 psi (7 bar). NLGI-2 grease.

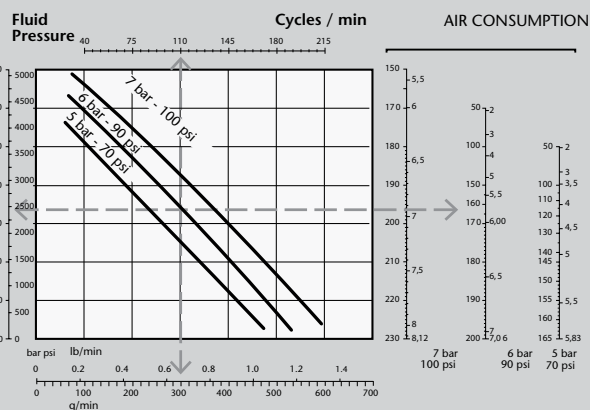
(3) Maximum noise level measured at 3' (1 m) from the pump, 100 psi (7 bar) air pressure and free delivery.

## DIMENSIONS Inches - (mm)

PART No.	300	302	304
A	24" (610)	36 1/2" (925)	44" (1.120)
B	8" (200)	8" (200)	8" (200)
C	1" (26)	1" (26)	1" (26)
D	16" (410)	28 1/2" (725)	36" (920)
E	1 1/2" (38)	1 1/2" (38)	1 1/2" (38)



## NLGI-2, 68 °F (20 °C) CAPACITY CURVE



## PUMPMASTER 3 - 55:1 GREASE PUMP PACKAGES



02

GREASE  
PUMPS

### PUMPMASTER 3 GREASE PUMP PACKAGES FOR 35 LB PAILS

PART No.	319	301 101	301 111	301 121
<b>PUMPMASTER 3 - 55:1 PUMP</b>	300	300	300	300
<b>PAIL COVER</b>	1934	1934	1934	1934
<b>FOLLOWER PLATE</b>	962	962	962	962
<b>DELIVERY HOSE</b>	5' x 1/4" (871 000)	10' x 1/4" (872 000)	10' x 1/4" (872 000)	10' x 1/4" (872 000)
<b>GREASE HANDLE</b>	413 077	413 077	413 077	413 077
<b>GREASE HANDLE SWIVEL</b>	Straight (1109)	Z-swivel (1105)	Z-swivel (1105)	Z-swivel (1105)
<b>1/4" QUICK AIR COUPLER</b>	-	930F04	930F04	930F04
<b>1/4" QUICK AIR NIPPLE</b>	-	933M04	933M04	933M04
<b>1/4" MINI FILTER REGULATOR COMBO</b>	-	955	955	955
<b>1/4" PUMP TO FR COMBO CONNECTOR</b>	-	2051	2051	2051
<b>CARRYING HANDLE</b>	2020	2020	2020	2020
<b>BAND DOLLY</b>	-	-	-	1302
<b>TWO WHEEL CART</b>	-	-	1301	-



### PUMPMASTER 3 GREASE PUMP PACKAGES FOR 120 AND 400 LB DRUMS

303 101

303 111

305 101

305 161



PART No.	320	303 101	303 111	303 141	303 201	303 211	303 241	305 101	305 161
<b>PUMPMASTER 3 - 55:1 PUMP</b>	120 lb (302)	120 lb (302)	120 lb (302)	120 lb (302)	120 lb (302)	120 lb (302)	120 lb (302)	400 lb (304)	400 lb (304)
<b>DRUM COVER</b>	1936	1936	1936	1936	1936	1936	1936	1938	1938
<b>FOLLOWER PLATE</b>	964	964	964	964	964	964	964	966	966
<b>DELIVERY HOSE</b>	5' x 1/4" (871 000)	10' x 1/4" (872 000)	10' x 1/4" (872 000)	10' x 1/4" (872 000)	20' x 1/4" (874 000)	20' x 1/4" (874 000)	20' x 1/4" (874 000)	20' x 1/4" (874 000)	20' x 1/4" (874 000)
<b>GREASE HANDLE</b>	413 077	413 077	413 077	413 077	413 077	413 077	413 077	413 077	413 077
<b>GREASE HANDLE SWIVEL</b>	Straight (1109)	Z-swivel (1105)	Z-swivel (1105)	Z-swivel (1105)	Z-swivel (1105)	Z-swivel (1105)	Z-swivel (1105)	Z-swivel (1105)	Z-swivel (1105)
<b>1/4" QUICK AIR COUPLER</b>	-	930F04	930F04	930F04	930F04	930F04	930F04	930F04	930F04
<b>1/4" QUICK AIR NIPPLE</b>	-	933M04	933M04	933M04	933M04	933M04	933M04	933M04	933M04
<b>1/4" MINI FILTER REGULATOR COMBO</b>	-	955	955	955	955	955	955	955	955
<b>1/4" PUMP TO FR COMBO CONNECTOR</b>	-	2051	2051	2051	2051	2051	2051	2051	2051
<b>BAND DOLLY</b>	-	-	-	1304	-	-	1304	-	-
<b>TWO WHEEL CART</b>	1301	-	1301	-	-	1301	-	-	-
<b>STANDARD-DUTY PLATFORM TRUCK</b>	-	-	-	-	-	-	-	-	1307

Product specifications are subject to change without prior notice

33



Heavy-Duty double acting pumps that combine high pressure (60:1 pressure ratio) and volume delivery. Recommended for use in distribution and greasing systems that include pipe lines, hose reels, etc. with up to 2 simultaneous use outlets even though the number of outlets in the system can be higher. Includes a height adjustable 2" NPTM bung adaptor.



#### FLUIDS HANDLED

- Grease up to NLGI-2.

#### MARKETS SERVED

- Heavy-Duty service shops.
- Fleet service.
- Lube trucks.
- Mining and construction.
- Railroad and mass transit.
- In-plant.

#### MODELS

PART No.	APPLICATION	WEIGHT
<b>530 611</b>	400 lb (185 kg) drum with bung adaptor	24 lb (11 kg)
<b>530 621</b>	120 lb (50 kg) keg with bung adaptor	22 lb (10 kg)
<b>530 631</b>	35 lb (12.5 - 20 kg) pail with bung adaptor	20 lb (9 kg)

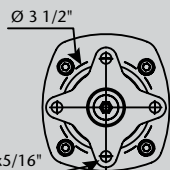
#### TECHNICAL DATA

Pump ratio	60:1
Air pressure operating range	20 to 145 psi (1,5 to 10 bar)
Air consumption (2)	15.9 scfm (450 NI/min)
Maximum fluid outlet pressure	8,700 psi (600 bar)
Air motor diameter	3.15" (80 mm)
Air motor stroke	3.15" (80 mm)
Delivery at 80 cpm (1)	1.1 lb/min (500 g/min)
Maximum free flow delivery	2.6 lb/min (1,200 g/min)
Air inlet	3/8" NTPF
Fluid outlet	3/8" NTPF
Wetted and seal materials	Cast Iron / Hard chromed steel / Steel / UHMWPE / NBR / PTFE / Viton®
Noise level (3)	80 dB
Manual	853 827

(1) Delivery at 80 cycles per minute.

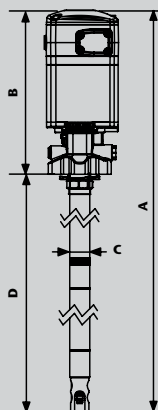
(2) Air consumption at 70 psi (5 bar) air pressure, NLGI-2 grease at 68 °F (20 °C) and 80 cpm.

(3) Noise level measured at 3' (1 m) from the pump, 100 psi (7 bar) air pressure and free delivery.

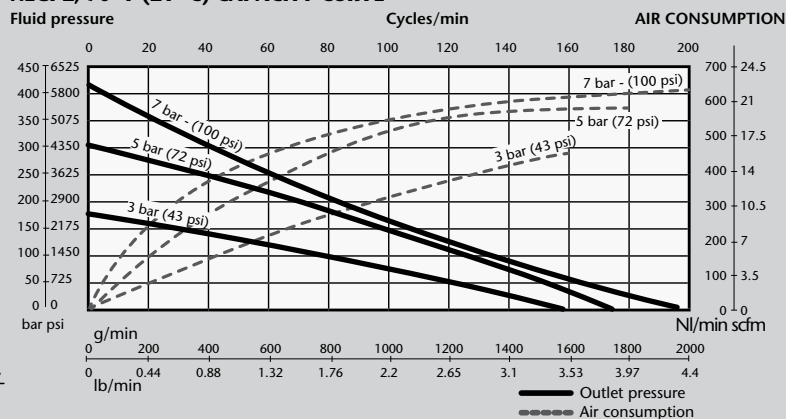


#### DIMENSIONS INCHES (mm)

PART No.	530 611	530 621	530 631
A	47 3/4" (1,212)	40" (1,017)	31 1/2" (803)
B	11 1/4" (287)	11 1/4" (287)	11 1/4" (287)
C	1 2/3" (35)	1 2/3" (35)	1 2/3" (35)
D	36 1/2" (925)	28 3/4" (730)	20 1/4" (516)



#### NLGI-2, 70 °F (21 °C) CAPACITY CURVE



## PUMPMaster 35 - 60:1 GREASE PUMP PACKAGES



### STATIONARY PUMPS FOR CENTRAL SUPPLY SYSTEMS AND REEL INSTALLATIONS

#### Part No. 336

PumpMaster 35 System for 120 lb open top keg.

#### Includes the following:

Part No. 530 621: 60:1 ratio PM35 pump with cover mounting adaptor.

Part No. 1936: Drum cover for 120 lb keg.

Part No. 964: Follower plate for 120 lb keg, with rubber grommet and wiper.

Part No. 901: Connection hose installation hook up kit.

#### Part No. 338

PumpMaster 35 System for 400 lb open top drum.

#### Includes the following:

Part No. 530 631: 60:1 ratio PM35 pump with cover mounting adaptor.

Part No. 1938: Drum cover for 400 lb drum.

Part No. 966: Follower plate for 400 lb drum, with rubber grommet and wiper.

Part No. 901: Connection hose installation hook up kit.



SAMSON recommends using an air filter regulator (Part No. 957) at the pump air inlet (not included with pump kits)

### PUMPMaster 35 PORTABLE GREASE PUMP PACKAGES FOR 35 LB PAILS

PART No.	402 201	402 211	402 221
<b>PUMPMaster 35 - 60:1 PUMP</b>	530 631	530 631	530 631
<b>PAIL COVER</b>	1934	1934	1934
<b>FOLLOWER PLATE</b>	962	962	962
<b>DELIVERY HOSE</b>	15' x 1/4" (873 000)	15' x 1/4" (873 000)	15' x 1/4" (873 000)
<b>GREASE HANDLE</b>	413 077	413 077	413 077
<b>GREASE HANDLE SWIVEL</b>	Z-swivel (1105)	Z-swivel (1105)	Z-swivel (1105)
<b>3/8" QUICK AIR COUPLER</b>	930F06	930F06	930F06
<b>3/8" QUICK AIR NIPPLE</b>	933M06	933M06	933M06
<b>3/8" MINI FILTER REGULATOR COMBO</b>	957	957	957
<b>3/8" PUMP TO FR COMBO CONNECTOR</b>	2052	2052	2052
<b>PUMP TO HOSE BUSHING</b>	2060	2060	2060
<b>CARRYING HANDLE</b>	2020	2020	2020
<b>BAND DOLLY</b>	-	-	1302
<b>TWO WHEEL CART</b>	-	1301	-



402 211

402 201

### PUMPMaster 35 PORTABLE GREASE PUMP PACKAGES FOR 120 LB KEGS

PART No.	333 201	333 241	333 211	333 231
<b>PUMPMaster 35 - 60:1 PUMP</b>	530 621	530 621	530 621	530 621
<b>KEG COVER</b>	1936	1936	1936	1936
<b>FOLLOWER PLATE</b>	964	964	964	964
<b>DELIVERY HOSE</b>	15' x 1/4" (873 000)	15' x 1/4" (873 000)	15' x 1/4" (873 000)	15' x 1/4" (873 000)
<b>GREASE HANDLE</b>	413 077	413 077	413 077	413 077
<b>GREASE HANDLE SWIVEL</b>	Z-swivel (1105)	Z-swivel (1105)	Z-swivel (1105)	Z-swivel (1105)
<b>3/8" QUICK AIR COUPLER</b>	930F06	930F06	930F06	930F06
<b>3/8" QUICK AIR NIPPLE</b>	933M06	933M06	933M06	933M06
<b>3/8" MINI FILTER REGULATOR COMBO</b>	957	957	957	957
<b>3/8" PUMP TO FR COMBO CONNECTOR</b>	2052	2052	2052	2052
<b>PUMP TO HOSE BUSHING</b>	2060	2060	2060	2060
<b>BAND DOLLY</b>	-	1304	-	-
<b>TWO WHEEL CART</b>	-	-	1301	-
<b>FOUR WHEEL CART</b>	-	-	-	1303



333 231

333 211

## PUMPMASTER 35 - 60:1 GREASE PUMP PACKAGES

02

GREASE  
PUMPS

### PUMPMASTER 35 GREASE PUMP PACKAGES FOR 400 LB DRUMS



335 201



335 261



311 001

PART No.	335 201	335 251	335 261	311 001
PUMPMASTER 35 – 60:1 PUMP	530 611	530 611	530 611	530 611
DRUM COVER	1938	1938	1938	1938
FOLLOWER PLATE	966	966	966	966
DELIVERY HOSE	15' x 1/4" (873 000)	15' x 1/4" (873 000)	15' x 1/4" (873 000)	-
HOSE REEL	-	-	-	30' x 1/4" (1432)
GREASE HANDLE	413 077	413 077	413 077	413 077
GREASE HANDLE SWIVEL	Z-swivel (1105)	Z-swivel (1105)	Z-swivel (1105)	Z-swivel (1105)
3/8" QUICK AIR COUPLER	930F06	930F06	930F06	930F06
3/8" QUICK AIR NIPPLE	933M06	933M06	933M06	933M06
3/8" MINI FILTER REGULATOR COMBO	957	957	957	957
3/8" PUMP TO FR COMBO CONNECTOR	2052	2052	2052	2052
PUMP TO HOSE BUSHING	2060	2060	2060	2060
X-FRAME DOLLY	-	1306	-	-
STANDARD-DUTY PLATFORM TRUCK	-	-	1307	-
HEAVY-DUTY PLATFORM TRUCK	-	-	-	1305



# PUMPMaster 45 - 25:1 Ratio Grease Pump



02

GREASE  
PUMPS

## HEAVY-DUTY PRESSURE TRANSFER PUMP

## PM45 HEAVY-DUTY SERIES

Moderate pressure, high delivery double acting pumps for transfer of grease up to NLGI-2. Also recommended for use with low viscosity grease in centralized grease systems that do not require a high pressure output and in large distribution systems of high viscosity oils.

Pumps are available with tube length to fit commercial 400 lb (185 kg) drums and they are available for flange cover mount to 400 lb (185 kg) open drums using a drum cover.

### FLUIDS HANDLED

- Grease up to NLGI-2.
- High viscosity oil.

### MARKETS SERVED

- Lube trucks.
- Mining and construction.
- In-plant.

### MODELS

PART No.	APPLICATION	WEIGHT
531 211	400 lb (185 kg) drum, flange mounted	50 lb (24 kg)

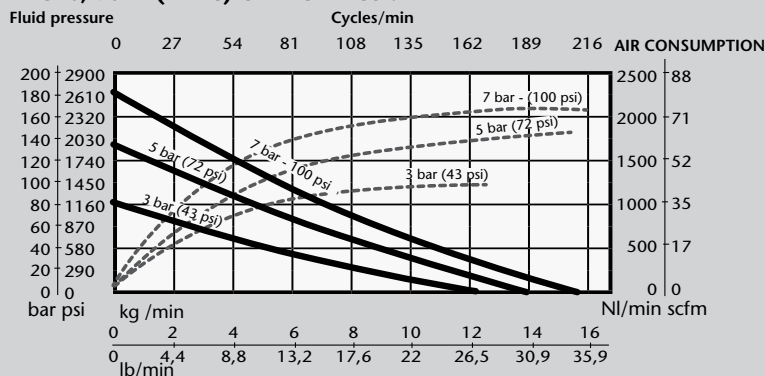
### TECHNICAL DATA

Pump ratio	25:1
Continuous duty flow rate	13.5 lb/min (6 kg/min)
Maximum free flow	35.3 lb/min (16 kg/min)
Air pressure operating range	20 - 200 psi (1,5 - 14 bar)
Maximum outlet pressure	5,000 psi (350 bar)
Air motor effective diameter	4 1/2" (115 mm)
Air motor stroke	4" (100 mm)
Air consumption (1)	47 scfm (1.340 NI/min)
Air inlet	1/2" NPTF
Fluid outlet	1/2" NPTF
Wetted and seal materials	Cast Iron / Steel / Hard chromed steel / UHMWPE / NBR
Noise level (2)	80 dB
Manual	853 820

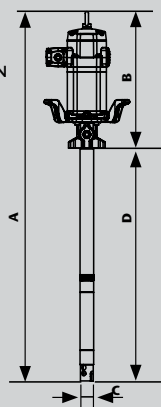
(1) Air consumption at 70 psi (5 bar) air pressure, NLGI-0 grease at 68 °F (20 °C) and 80 cpm.

(2) Noise level measured at 3' (1 m) from the pump, 100 psi (7 bar) air pressure and free delivery.

### NLGI-0, 70 °F (21 °C) CAPACITY CURVE



— Outlet pressure  
----- Air consumption



### DIMENSIONS Inches - (mm)

PART No.	531 211
A	53 1/4" (1.357)
B	19 3/4" (502)
C	2" (50)
D	33 1/2" (855)

High flow double acting pumps with high pressure delivery for use in lubrication systems that require a combination of high flow and pressure delivery. Pumps can be used with grease up to NLGI-2 viscosity. These pumps can be used in medium length systems that include simultaneous operation outlets.

Pumps are available for cover mount to 120 lb (50 kg) and 400 lb (185 kg) open drums and for horizontal and side mount on grease totes, bags and tanks.

#### FLUIDS HANDLED

- Grease up to NLGI-2.

#### MARKETS SERVED

- Heavy-Duty service shops.
- Fleets.
- Mining and construction.
- Railroad and mass transit.
- In-plant.
- Marine.

MODELS		
PART No.	APPLICATION	WEIGHT
531 411	400 lb (185 kg) drum, flange mounted	55 lb (25 kg)
531 421	120 lb (50 kg) keg, flange mounted	49 lb (22 kg)
531 431*	Bulk tote	57 lb (26 kg)

\* Includes adaptor 753 110 to fit a 3" cam-lock connector for use with totes, grease bags and tanks.

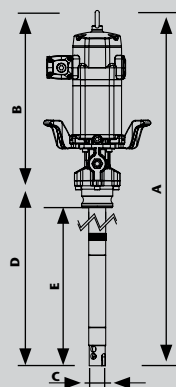
TECHNICAL DATA	
Pump ratio	40:1
Continuous duty flow rate	7.5 lb/min (3,5 kg/min)
Maximum free flow	22 lb/min (11 kg/min)
Air pressure operating range	20 - 200 psi (1,5 - 14 bar)
Maximum outlet pressure	8,000 psi (560 bar)
Air motor effective diameter	4 1/2" (115 mm)
Air motor stroke	4" (100 mm)
Air consumption (1)	26.5 scfm (750 NI/min)
Air inlet	1/2" NPTF
Fluid outlet	1/2" NPTF
Wetted and seal materials	Cast Iron / Steel / Hard chromed steel / UHMW PE / NBR / PTFE
Noise level (2)	80 dB
Manual	853 814

(1) Air consumption at 70 psi (5 bar) air pressure, NLGI-2 grease at 68 °F (20 °C) and 80 cpm.

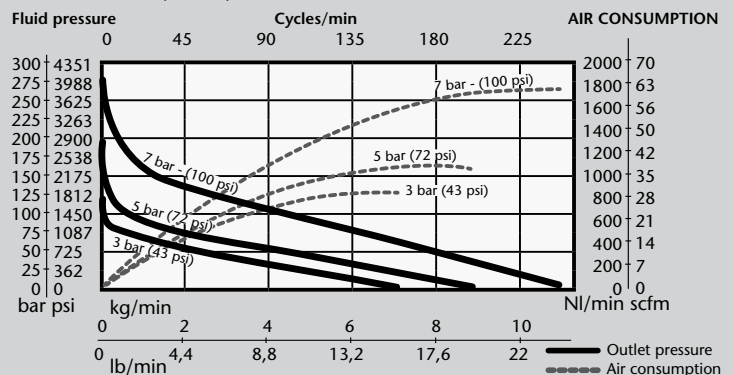
(2) Noise level measured at 3' (1 m) from the pump, 100 psi (7 bar) air pressure and free delivery.



DIMENSIONS Inches - (mm)			
PART No.	531 411	531 421	531 431*
A	53 1/4" (1.357)	45 1/4" (1.152)	38 3/4" (992)
B	19 3/4" (502)	19 3/4" (502)	19 3/4" (502)
C	2" (50)	2" (50)	2" (50)
D	33 1/2" (855)	25 1/2" (650)	19" (490)
E	-	-	16" (410)



#### NLGI-2, 70 °F (21 °C) CAPACITY CURVE



# PUMPMASTER 45 - 70:1 RATIO GREASE PUMPS



## HEAVY-DUTY HIGH PRESSURE PUMPS

## PM45 HEAVY-DUTY SERIES

02

GREASE  
PUMPS

High pressure double acting pump for use in applications requiring extra pressure output due to cold temperatures or when low air pressure could limit pump performance. Pumps can be used with grease up to NLGI-2 viscosity. These pumps can be used in large distribution systems that include simultaneous operation outlets.

Pumps are available for cover mount to 120 lb (50 kg) and 400 lb (185 kg) open drums and for horizontal and side mount on grease totes, bags and tanks.

### FLUIDS HANDLED

- Grease up to NLGI-2.

### MARKETS SERVED

- Heavy-Duty service shops.
- Fleets.
- Lube trucks.
- Mining and construction.
- Railroad and mass transit.
- In-plant.
- Marine

### MODELS

PART No.	APPLICATION	WEIGHT
<b>531 711</b>	400 lb (185 kg) drum, flange mounted	55 lb (25 kg)
<b>531 721</b>	120 lb (50 kg) keg, flange mounted	48.5 lb (22 kg)
<b>531 731*</b>	Bulk tote	46.3 lb (21 kg)

\* Includes adaptor 753 110 to fit a 3" cam-lock connector for use with totes, grease bags and tanks.

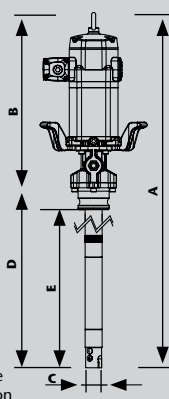
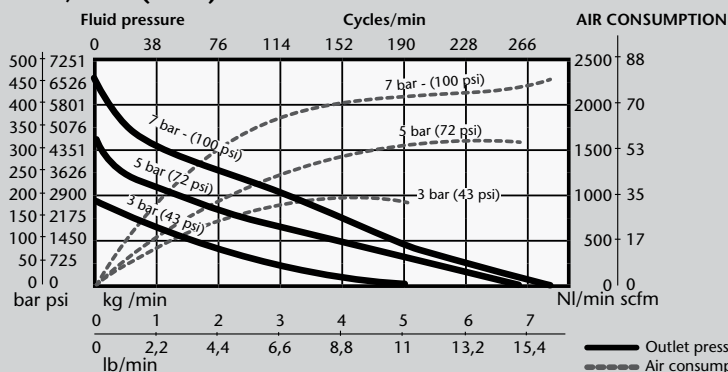
### TECHNICAL DATA

Pump ratio	70:1
Continuous duty flow rate	4.5 lb/min (2 kg/min)
Maximum free flow	16.5 lb/min (7,5 kg/min)
Air pressure operating range	20 - 100 psi (1,5 - 7 bar)
Maximum outlet pressure	7,000 psi (490 bar)
Air motor effective diameter	4 1/2" (115 mm)
Air motor stroke	4" (100 mm)
Air consumption (1)	33 scfm (925 NI/min)
Air inlet	1/2" NPTF
Fluid outlet	1/2" NPTF
Wetted and seal materials	Cast Iron / Steel / Hard chromed steel / UHMW PE / NBR / PTFE
Noise level (2)	80 dB
Manual	853 815

(1) Air consumption at 70 psi (5 bar) air pressure, NLGI-2 grease at 68 °F (20 °C) and and 80 cpm.

(2) Noise level measured at 3' (1 m) from the pump, 100 psi (7 bar) air pressure and free delivery.

### NLGI-2, 70 °F (21 °C) CAPACITY CURVE



### DIMENSIONS Inches - (mm)

PART No.	531 711	531 721	531 731*
A	53 1/4" (1.357)	45 1/4" (1.152)	39" (992)
B	19 3/4" (502)	19 3/4" (502)	19 3/4" (502)
C	2" (50)	2" (50)	2" (50)
D	33 1/2" (855)	25 1/2" (650)	19 1/4" (490)
E	-	-	16 1/4" (410)

Moderate pressure, very high volume double acting grease pump for use in transfer applications. These pumps can be used with all types of grease up to NLGI-2.

Pumps are available for horizontal mounting on grease totes and grease bags and they include an adaptor to fit a 3" cam-lock adaptor. They can be used with 400 lb (185 kg) drums when mounted to air pneumatic inductor (see "Grease pump systems" section in this chapter.)



#### FLUIDS HANDLED

- Grease up to NLGI-2.

#### MARKETS SERVED

- Mining and construction.
- In-plant grease transfer.
- Railroad and mass transit.

MODELS		
PART No.	APPLICATION	WEIGHT
532 131*	Bulk tote, includes 3" cam-lock adaptor	39 lb (19 kg)

\* Includes adaptor 753 110 to fit a 3" cam-lock connector for use with totes, grease bags and tanks.

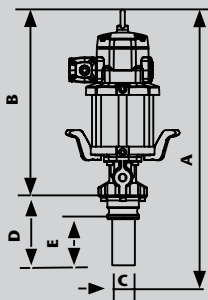
TECHNICAL DATA	
Pump ratio	12:1
Continuous duty flow rate	33 lb/min (15 kg/min)
Maximum free flow	88 lb/min (40 kg/min)
Air pressure operating range	20 - 100 psi (1,5 - 7 bar)
Maximum outlet pressure	1,200 psi (84 bar)
Air motor effective diameter	6" (150 mm)
Air motor stroke	4" (100 mm)
Air consumption (1)	39 scfm (1.100 NL/min)
Air inlet	1/2" NPTF
Fluid outlet	1" NPTF
Wetted and seal materials	Cast Iron / Steel / Hard chromed steel / UHMWPE / NBR / PTFE / Polyurethane
Noise level (2)	80 dB
Manual	853 816

(1) Air consumption at 70 psi (5 bar) air pressure, NLGI-2 grease at 68 °F (20 °C) and 60 cpm.

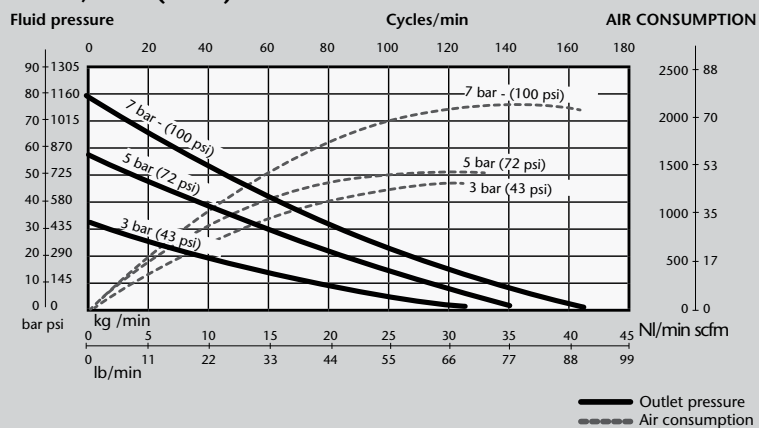
(2) Noise level measured at 3' (1 m) from the pump, 100 psi (7 bar) air pressure and free delivery.



DIMENSIONS Inches - (mm)	
PART No.	532 131
A	29" (742)
B	20" (516)
C	2 3/4" (70)
D	9" (226)
E	5 3/4" (146)



#### NLGI-2, 70 °F (21 °C) CAPACITY CURVE



# PUMPMASTER 60 - 80:1 RATIO GREASE PUMPS



## HEAVY-DUTY HIGH PERFORMANCE PUMPS

## PM60 HEAVY-DUTY SERIES

02

GREASE  
PUMPS

Very high pressure and high volume delivery double acting pump for use in applications that require extra pressure and volume output and where cold temperatures or low air pressure could limit pump performance. Pumps can be used with grease up to NLGI-2 viscosity. These pumps can be used in large distribution systems that include simultaneous operation outlets. Pumps are available for cover mount to 120 lb (50 kg) and 400 lb (185 kg) open drum.

### FLUIDS HANDLED

- Grease up to NLGI-2.

### MARKETS SERVED

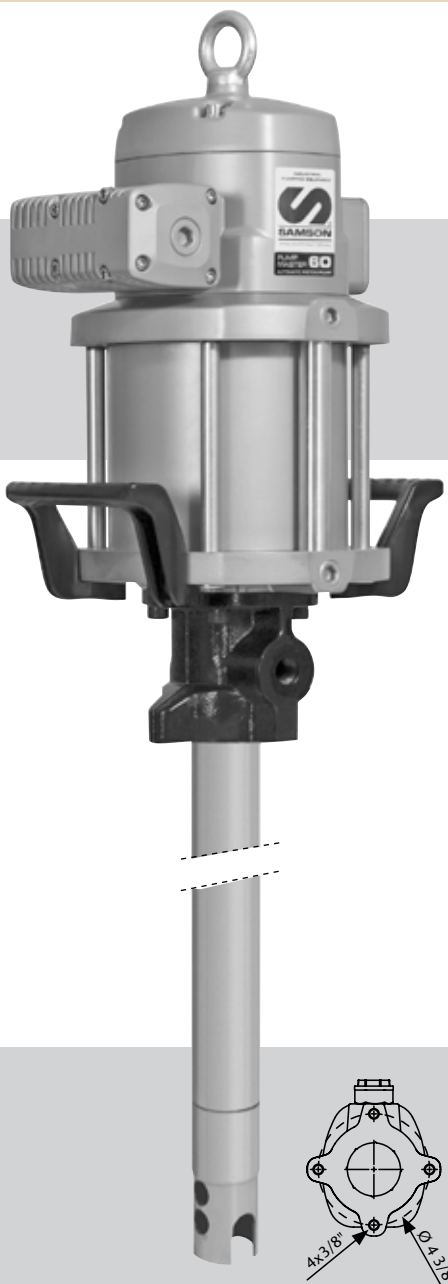
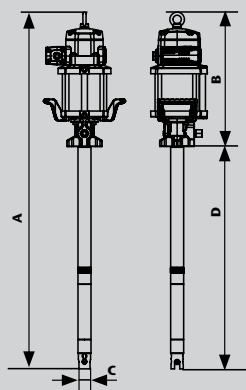
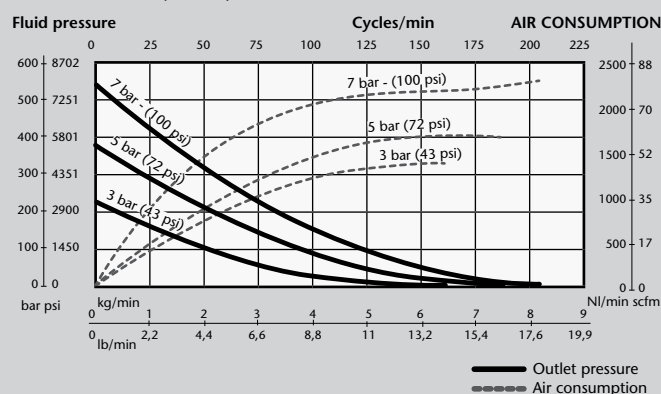
- Mining and construction.
- In-plant.
- Railroad and mass transit.
- Lube trucks.
- Fleets.

MODELS		
PART No.	APPLICATION	WEIGHT
<b>532 811</b>	400 lb (185 kg) drum, flange mounted	60 lb (27 kg)
<b>532 821</b>	120 lb (50 kg) keg, flange mounted	53 lb (24 kg)

TECHNICAL DATA	
Pump ratio	80:1
Continuous duty flow rate	5.5 lb/min (2,5 kg/min)
Maximum free flow	17.6 lb/min (8 kg/min)
Air pressure operating range	20 - 100 psi (1,5 - 7 bar)
Maximum outlet pressure	8,000 psi (560 bar)
Air motor effective diameter	6" (150 mm)
Air motor stroke	4" (100 mm)
Air consumption (1)	35 scfm (1.000 NI/min)
Air inlet	1/2" NPTF
Fluid outlet	1/2" NPTF
Wetted and seal materials	Cast Iron / Steel / Hard chromed steel / UHMW PE / NBR / PTFE
Noise level (2)	80 dB
Manual	853 819

- (1) Air consumption at 70 bar (5 bar) air pressure, NLGI-2 grease at 68 °F (20 °C) and 60 cpm.  
 (2) Noise level measured at 3' (1 m) from the pump, 100 psi (7 bar) air pressure and free delivery.

### NLGI-2, 70 °F (21 °C) CAPACITY CURVE



DIMENSIONS Inches - (mm)		
PART No.	532 811	532 821
A	53 1/2" (1.371)	45 1/2" (1.166)
B	20" (516)	20" (516)
C	2" (50)	2" (50)
D	33 1/2" (855)	25 1/2" (650)



## PUMPMASTER 45 PUMP SYSTEMS

PM45 pump systems for 120 and 400 lb (50 and 185 kg) drums, totes and grease bins.



534 711

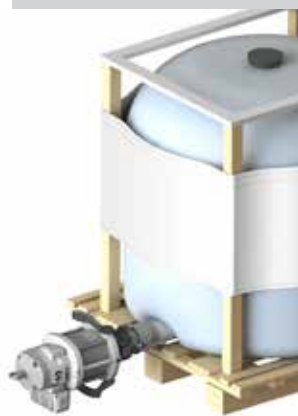
	KIT PART No.	PUMP	RATIO	COVER	FOLLOWER PLATE	CONNECTION KIT	CAMLOCK FEMALE	CAMLOCK MALE
<b>120 lb (50 kg) KEG MOUNTED PUMP KIT</b>	<b>534 420</b>	531 421	40:1	418 017	417 011	534 103	-	-
	<b>534 720</b>	531 721	70:1	418 017	417 011	534 103	-	-
<b>400 lb (185 kg) DRUM MOUNTED PUMP KIT</b>	<b>534 410</b>	531 411	40:1	418 026	417 009	534 103	-	-
	<b>534 710</b>	531 711	70:1	418 026	417 009	534 103	-	-
	<b>534 210</b>	531 211	25:1	418 026	417 009	534 103	-	-
<b>TANK SIDE MOUNTED PUMP KIT</b>	<b>534 240</b>	531 211	25:1	-	-	534 103	950 358	753 110
	<b>534 440</b>	531 411	40:1	-	-	534 103	950 358	753 110
	<b>534 740</b>	531 711	70:1	-	-	534 103	950 358	753 110
<b>TANK HORIZONTAL MOUNTED PUMP KIT</b>	<b>534 441</b>	531 431	40:1	-	-	534 103	950 358	(1)
	<b>534 741</b>	531 731	70:1	-	-	534 103	950 358	(1)

1) Included with pump.

SAMSON recommends using an air filter and pressure regulator at the pump air inlet and a high pressure needle valve between the grease delivery hose and the grease distribution line.

## PUMPMASTER 60 PUMP SYSTEMS

PM60 pump systems for 120 lb (50 kg) and 400 lb (185 kg) drum, tote and grease bin mounting.

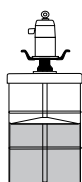


534 141

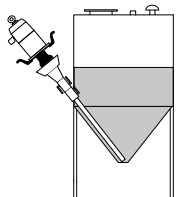
	KIT PART No.	PUMP	RATIO	COVER	FOLLOWER PLATE	CONNECTION KIT	CAMLOCK FEMALE	CAMLOCK MALE
<b>120 lb (50 kg) KEG MOUNTED PUMP KIT</b>	<b>534 820</b>	532 821	80:1	418 017	417 011	534 103	-	-
<b>400 lb (185 kg) DRUM MOUNTED PUMP KIT</b>	<b>534 810</b>	532 811	80:1	418 026	417 009	534 103	-	-
<b>TANK SIDE MOUNTED PUMP KIT</b>	<b>534 840</b>	532 811	80:1	-	-	534 103	950 358	753 110
<b>TANK HORIZONTAL MOUNTED PUMP KIT</b>	<b>534 141</b>	532 131	12:1	-	-	539 009	950 358	(1)

(1) Included with pump.

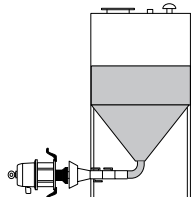
SAMSON recommends using an air filter and pressure regulator at the pump air inlet and a high pressure needle valve between the grease delivery hose and the grease distribution line.



Drum mounted  
pump



Tank side  
mount pump



Tank horizontal  
mount pump

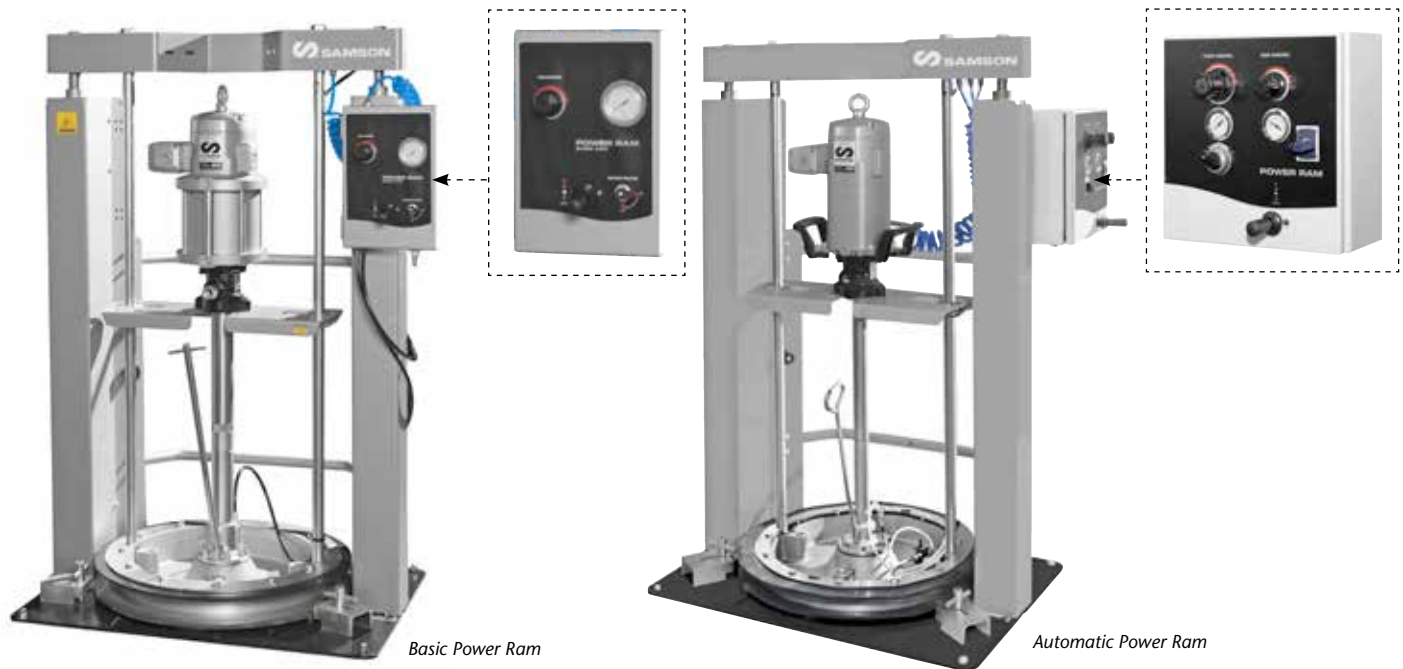
### 391 022

### PUMP HOIST

#### Part No. 391 022

Maximum utility air operated hoist lifts and lowers pump, making drum changes easier, faster and safer. Hoist arm adjusts to fit different pump heights and swings a full 360°, serving one or more pumps. It can be used with 400 lb and 120 lb drums. For use with PM45 and PM60 pumps.  
Maximum height raised: 104".  
Minimum height lowered: 64".





PumpMaster 45 and PumpMaster 60 grease pumps mounted onto an air operated inductor plate for use with high viscosity, hard to pump greases directly from 400 lb drum.

When the double lip inductor plate is attached to the lower end of the pump tube, it exerts pneumatic, weight and atmospheric pressure on the material forcing pump priming. The inductor plate also serves as protection against contaminants and eliminates material waste.

There are two Power Ram models. The **BASIC Power Ram** includes:

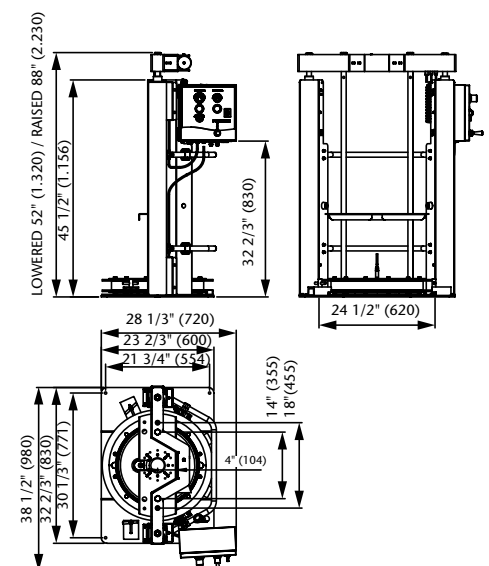
- Follower plate with double Buna-N lip seals guide rods
  - Platform base with drum retainers.
  - Controls for raising and lowering the inductor plate with pressure regulator.
  - Ball valve for releasing the vacuum manually when the plate is removed from an empty drum.
  - Pump adapter for fixing the pump to the follower plate
- Pump air connection accessories are not included.

The **AUTOMATIC Power Ram** includes the same features as the Basic model plus:

- Pump air connection accessories.
- On / Off control of the pump.
- Up / Down control of the ram for easy drum exchange.
- Two independent air pressure regulators, one for the pump and the other for the power ram cylinders.
- Pump / Ram independent air pressure gauge.
- Automatic empty drum pump shut-off safety feature.
- Automatic Vacuum release.

PART No. WITH BASIC POWER RAM	PART No. WITH AUTOMATIC POWER RAM	PUMP INCLUDED
534 421A	534 421	PM45 - 40:1, Part No. 531 421
534 721A	534 721	PM45 - 70:1, Part No. 531 721
534 121A	534 121	PM60 - 12:1, Part No. 532 121
534 821A	534 821	PM60 - 80:1, Part No. 532 821

Dimensions in inches (mm)







**Part No. 534 321**

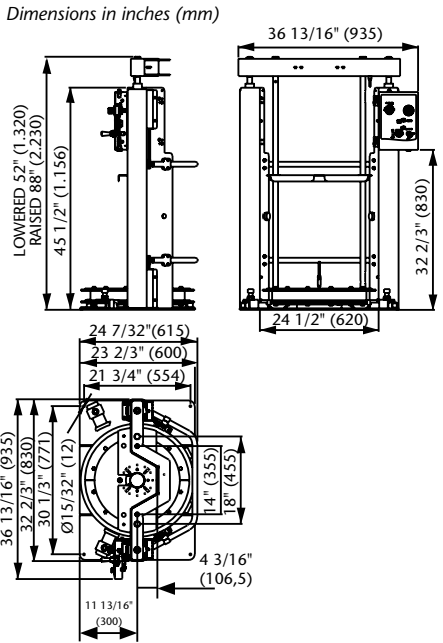
3:1 pressure ratio pump with a PM60 air motor for very high volume of grease through short hoses with a minimum I.D. of 1 1/2". Pump is mounted to an air operated double post inductor allowing the end user to empty a 400 lb drum in less than three minutes (NLGI-2 grease at 70 °F, 100 psi air inlet pressure and a 2" delivery hose).

The air operated inductor includes a follower plate with double Buna-N lip seals, guide rods, drum retainers, controls for lowering and raising the follower plate with pressure regulator, and a valve for manually releasing the vacuum when the follower plate is removed from an empty drum. Pump air connection accessories are not included.

TECHNICAL DATA	
Pump pressure ratio	3:1
Maximum free flow	330 lb/min (150 Kg/min)
Continuous duty flow rate at 80 cpm	132 lb/min (60 Kg/min)
Air pressure operating range	30 to 100 psi (2 to 7 bar)
Maximum outlet pressure	300 psi (21 bar)
Air motor effective diameter	6" (150 mm)
Air motor stroke	4" (100 mm)
Air consumption <sup>(1)</sup>	44 scfm (1.250 NI/min)
Air inlet	1/2" NPT (F)
Fluid outlet	2" NPT (F)
Wetted and seal materials	Steel / Hard chromed steel / Zinc plated steel / Aluminum / PTFE / NBR / FKM / PU / Nickel plated aluminum

(1) Air consumption at 70 psi air pressure, NLGI-2 grease at 68 °F and 60 cpm.

SAMSON recommends using an air filter and air pressure regulator at the pump air inlet. Use 1/2" air accessories to obtain pump maximum performance.  
For higher delivery, always use the shortest possible delivery hose with the largest i.d. possible.



## GREASE PUMP ACCESSORIES HOSE CONNECTION KITS, COVERS, AND FOLLOWERS

### PUMPMaster 35 - 60:1



*Pump not included.*

#### Part No. 901

High pressure hose installation hook-up connection kit for **PumpMaster 35 - 60:1** grease pump.

#### Includes the following:

Part No. 813: 5' air hose, 3/8" NPTM both ends.  
Part No. 930F06: Quick air coupler, 3/8" NPTF.  
Part No. 933M06: Quick air nipple, 3/8" NPTM.  
Part No. 884: 5' high pressure 3/8" hose, 3/8" NPTM both ends.

#### Recommended option:

Part No. 957: Air filter regulator combo, 3/8" NPT (F).

*All air and grease hoses have one swivel end.*

### PUMPMaster 45 & PUMPMaster 60



*Pump not included.*

#### Part No. 534 103

High pressure hose installation hook-up connection kit for **PumpMaster 45 and PumpMaster 60** high pressure grease pumps.

#### Includes the following:

Part No. 823: 5' air hose, 1/2" NPTM both ends.  
Part No. 938F08: Quick air coupler, 1/2" NPTF.  
Part No. 947M08: Quick air nipple, 1/2" NPTM.  
Part No. 884: 5' high pressure 3/8" hose, 3/8" NPTM both ends.  
Part No. 1981: 90° swivel, 1/2" NPTF x 1/2" NPTM.  
Part No. 1979: 90° swivel, 1/2" NPTM x 3/8" NPSM (F).

#### Recommended option:

Part No. 958: Air filter regulator combo, 1/2" NPT (F).

*All air and grease hoses have one swivel end.*

### PUMPMaster 60 - 12:1



*Pump not included.*

#### Part No. 539 009

Medium pressure hose installation hook-up connection kit for **PumpMaster 60 - 12:1** high delivery, medium pressure grease pumps.

#### Includes the following:

Part No. 823: 5' air hose, 1/2" NPTM both ends.  
Part No. 938F08: Quick air coupler, 1/2" NPTF.  
Part No. 947M08: Quick air nipple, 1/2" NPTM.  
Part No. 863: 5' medium pressure 1" hose, 1" NPTM both ends.  
Part No. 1981: 90° swivel, 1/2" NPTF x 1/2" NPTM.

#### Recommended option:

Part No. 958: Air filter regulator combo, 1/2" NPT (F).

*All air and grease hoses have one swivel end.*

## DRUM COVERS AND HEAVY-DUTY DRUM COVERS



2" NPTF bung opening, allows mounting a **PumpMaster 3** or a **PumpMaster 35** pump to an open top 35 lb pail, 120 lb keg or a 400 lb drum.

**Part No. 1934** Drum cover for 35 lb pails.

**Part No. 1936** Cover for 120 lb kegs.

**Part No. 1938** Cover for 400 lb open top drums.

Allows mounting a flange mounted **PumpMaster 45** or **PumpMaster 60** pump to an open top drum.

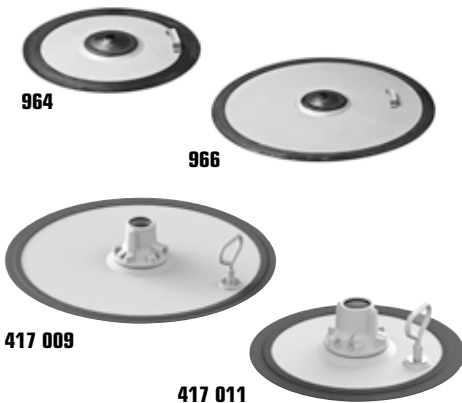
**Part No. 418 017** Heavy-duty cover for 120 lb kegs.

**Part No. 418 026** Heavy-duty cover for 400 lb open top drums.

**Part No. 360 133** Converter for flange type drum cover.

Converts flange mount to standard 2" NPTF bung opening, thus permits the use of bung mounted type pumps with Heavy-Duty drum cover.

## FOLLOWER PLATES



### Standard-Duty follower plates for PumpMaster 3 and 35 pumps

**Part No. 962** Follower plate for 35 lb pails.

**Part No. 964** Follower plate for 120 lb kegs.

**Part No. 966** Follower plate for 400 lb drums.

### Heavy-Duty follower plates for PumpMaster 45 and 60 pumps

**Part No. 417 011** Heavy-Duty follower plate for 120 lb kegs.

**Part No. 417 009** Heavy-Duty follower plate for 400 lb drums.



## GREASE PUMP ACCESSORIES

### BUNG AND CAM-LOCK ADAPTORS



**Part No. 2028**

Bung adaptor for PM3 - 55:1 pressure ratio pumps.

**Part No. 609 106**

Bung adaptor for PM35 - 60:1 pressure ratio pumps.

**Part No. 609 104**

Bung adaptor for all PM45 grease pumps and for PM60 - 80:1 pressure ratio pump.

**Part No. 753 110**

3" cam-lock adaptor. Allows mounting PM45 and PM60 to tanks, totes and fluid bags fitted with a standard 3" Cam-Lock connection.

**Part No. 950 358**

3" cam-lock connector.

**Part No. 244 901**

Waterproof adaptor PM3 & PM35.

### DOLLIES



**Part No. 1302 (not shown)**

Band type dolly for 35 lb pail.

**Part No. 1304**

Band Type dolly for 120 lb keg.

**Part No. 1306**

X-frame type dolly for 400 lb drum.

### SHUT OFF VALVES



HIGH PRESSURE NEEDLE VALVES		MEDIUM PRESSURE BALL VALVES		LOW PRESSURE BALL VALVES	
10,000 psi		2,000 psi		600 psi	
Part No.		Part No.		Part No.	
2077	1/2" NPTF	2074	1/2" NPTF	2013	1/4" NPT F
2089	3/4" NPTF	2083	3/4" NPTF	2088	1/2" NPTF
2093	1" NPTF	2090	1" NPTF	2091	3/4" NPTF
		2082	1-1/2" NPTF	2084	1" NPTF

### DRUM TROLLEYS



**Part No. 1301**

Two wheel trolley for 35 lb pails and 120 lb kegs.

**Part No. 1303**

Four wheel cart for 120 lb keg.

**Part No. 1307**

Standard-Duty platform truck for 400 lb drum. Not recommended for water based fluids.

**Part No. 1305**

Heavy-Duty 3 wheel platform truck for 400 lb drum. Swivel wheel with locking bracket and two pneumatic tires.

**Part No. 1399**

Mounting plate required for mounting a hose reel to truck part number 1305.

**Part No. 1312**

Platform base for kegs.

**Part No. 360 135 (not shown)**

Hose reel bracket for 1307 platform truck.

**Part No. 360 134 (not shown)**

Pump bracket for 1307 platform truck (require wall bracket specific to the pump being mounted).



## GREASE PUMP MOUNTING ACCESSORIES QUICK REFERENCE CHART

PUMP	PUMPMASTER 3	PUMPMASTER 35	PUMPMASTER 45	PUMPMASTER 45	PUMPMASTER 45	PUMPMASTER 60	PUMPMASTER 60
RATIO	55:1	60:1	25:1	40:1	70:1	12:1 (1)	80:1
BUNG ADAPTOR	2028	609 106	609 104 (2)	609 104 (2)	609 104 (2)	-	609 104 (2)
CONNECTION HOSE KIT	412 910	901	534 103	534 103	534 103	539 009	534 103
DRUM COVER 400 LB	1938	1938	418 026	418 026	418 026	N/A	418 026
KEG COVER 120 LB	1936	1936	N/A	418 017	418 017	N/A	418 017
PAIL COVER	1934	1934	N/A	N/A	N/A	N/A	N/A
FOLLOWER PLATE 400 LB DRUM	966	966	417 009	417 009	417 009	N/A	417 009
FOLLOWER PLATE 120 LB KEGS	964	964	N/A	417 011	417 011	N/A	417 011
FOLLOWER PLATE 35 LB KEGS	962	962	N/A	N/A	N/A	N/A	N/A
SINGLE POST PUMP HOIST	N/A	N/A	N/A	391 022	391 022	N/A	391 022
CAM-LOCK ADAPTOR	N/A	N/A	N/A	753 110 (3)	753 110 (3)	753 110 (3)	753 110 (4)
CAM-LOCK CONNECTOR	N/A	N/A	N/A	950 358	950 358	950 358	N/A
AIR FILTER / REGULATOR	955	957	958	958	958	958	958
FRL	983	984	985	985	985	985	985
AIRLINE SHUTOFF VALVE	2088	2088	2088	2088	2088	2088	2088
FLUID SHUTOFF VALVE	2077	2077	2077	2077	2077	2093	2077
QUICK AIR COUPLER	930F04	930F06	938F08	938F08	938F08	938F08	938F08
QUICK AIR NIPPLE	933M04	933M06	947M08	947M08	947M08	947M08	947M08
AIR CONNECTION ACCESSORIES I.D.	1/4" - 6 mm	3/8" - 8 mm	1/2" - 12,5 mm	1/2" - 12,5 mm	1/2" - 12,5 mm	1/2" - 12,5 mm	1/2" - 12,5 mm

(1) PM60, 12:1 pump is only available for horizontal mount on tanks, totes and grease bags.

(2) For better pump efficiency, SAMSON recommends flange mounting these pumps to a drum cover.

(3) Included in short pumps for horizontal mount on tanks, totes and grease bags. Required for vertical mount on grease tanks (long pumps).

(4) For vertical mount on grease tanks only (long pumps).