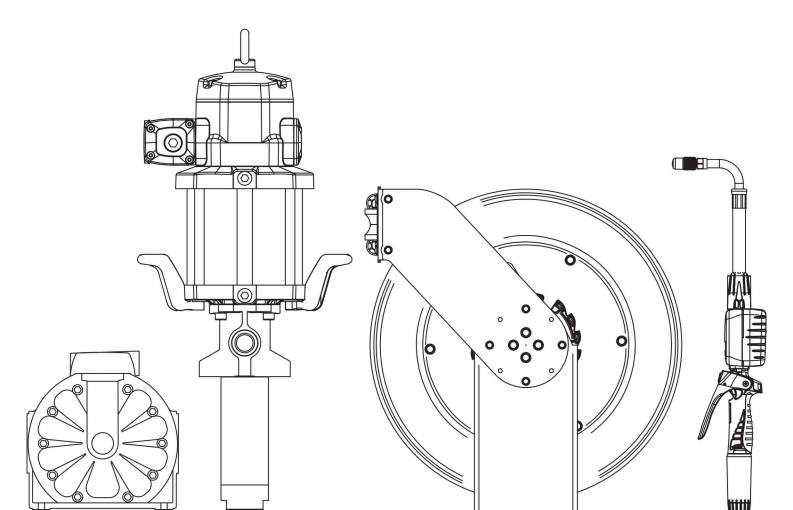


PRODUCT CATALOGUE

LUBRICATION EQUIPMENT
AUTOMOTIVE • PETROLEUM • INDUSTRIAL





02 AIR OPERATED GREASE PUMPS AND KITS

AIR OPERATED GREASE PUMPS
PUMPMASTER 3 - 55:1 RATIO GREASE PUMPS
PUMPMASTER 3 ACCESSORIES
PUMPMASTER 35 - 60:1 RATIO GREASE PUMPS
PUMPMASTER 35 ACCESSORIES
PUMPMASTER 45 - 25:1 RATIO GREASE PUMP
PUMPMASTER 45 - 40:1 RATIO GREASE PUMPS
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PUMPMASTER 60 - 80:1 RATIO GREASE PUMPS
PUMPMASTER 45 & 60 INSTALLATION KITS
PUMPMASTER 45 & 60 GREASE PUMP KITS
PUMPMASTER 35, 45 & 60 GREASE PUMP KITS
GREASE PUMP ACCESSORIES









AIR OPERATED GREASE PUMPS

SAMOA 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 mobile and portable units to large distribution systems.

SAMOA's grease pumps are designed to provide years of dependable service. The in-line balanced design assures maximum pump efficiency. All Samoa pumps have a double acting design, pumping product on both the upstroke and downstroke. An effective priming piston provides positive pump, 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®

UTILITY PUMP



HEAVY-DUTY



	PUMPMASTER 3 - 55:1	PUMPMASTER 35 - 60:1
PUMP DESCRIPTION	Utility high pressure	Heavy-Duty high pressure
SIMULTANEOUS OPERATION OUTLETS	1 No reels - mobile units	3
MAX. LINE LENGTH	15 m - 50'	75 m - 250'
APPLICATION	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







HEAVY-DUTY



PUMPMASTER 45 - 25:1	PUMPMASTER 45 - 40:1	PUMPMASTER 45 - 70:1	PUMPMASTER 60 - 12:1	PUMPMASTER 60 - 80:1
Heavy-Duty pressure transfer	Heavy-Duty high flow	Heavy-Duty high pressure	Heavy-Duty volume transfer	Heavy-Duty high performance
1 or more	4 or more	4 or more	1 High volume transfer	4 or more
75 m - 250'	125 m - 400'	175 m - 600'	50 m - 175'	250 m - 800'
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



PUMPMASTER 3 - 55:1 RATIO GREASE PUMPS

407 200

UTILITY HIGH PRESSURE PUMPS

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

Pumps are available with four different suction tube lengths, to fit all commercial grease drums: 12.5 - 20 kg (40 lb), 50 kg (120 lb) and 185 kg (400 lb). They include a height adjustable 2" BSP (M) bung adaptor.



FLUIDS HANDLED

• Grease up to NLGI-2.

MARKETS SERVED

- Agriculture.
- Service shops.
- Light industrial.

		MODELS		
		MIODELS		
PART No.	APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT
404 100	12.5 - 20 kg (40 lb) pails	410 mm	650 mm	3.5 kg
405 100	50 kg (120 lb) drums	510 mm	710 mm	3.7 kg
407 200	50 kg (120 lb) drums	725 mm	925 mm	4.3 kg
409 200	185 kg (400 lb) drums	920 mm	1,120 mm	4.8 kg
	TEC	CHNICAL DATA		
Dump proceure	ratio	55.1		

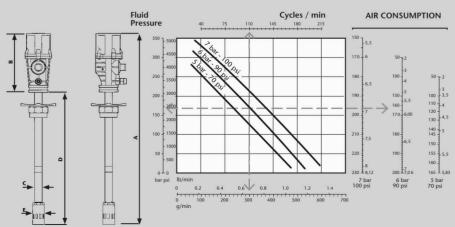
TECHNICAL DATA						
Pump pressure ratio	55:1					
Air pressure operating range	1.5 to 10 bar (20 to 140 psi)					
Air consumption (1)	165 NL/min (5.8 cfm)					
Maximum fluid outlet pressure	550 bar (7,700 psi)					
Air motor diameter	70 mm (2.75")					
Air motor stroke	35 mm (1.4")					
Delivery at 110 cpm	300 g/min (0.67 lb/min)					
Maximum free flow delivery (2)	540 g/min (1.2 lb/min)					
Air inlet	1/4" NPSM (F)					
Fluid outlet	1/4" NPSM (F)					
Wetted and seal materials	Steel / NBR / PTFE					
Noise level (3)	92 dB					

(1) Maximum air consumption with 6 bar air inlet pressure, NLGI-2 grease at 20 $^{\circ}$ C and 110 cpm.

NLGI-2, 20 °C (68 °F) CAPACITY

- (2) Maximum free delivery at 7 bar. NLGI-2 grease.
- (3) Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

DIMENSIONS (mm) MODEL 404 100 405 100 407 200 409 200 610 710 925 1,120 Α В 200 200 200 200 C 26 26 26 26 510 D 410 725 920 38 38 38 38



PUMPMASTER 3 - 55:1 RATIO GREASE PUMPS



424 172 - 424 152

482 200

425 150.002

428 243

Mobile and portable units to fit 18, 20, 50 and 185 kg drums.









Part No.	APPLICATION	PUMP	DRUM COVER	FOLLOWER PLATE	DELIVERY HOSE	GREASE GUN WITH Z-SWIVEL	TROLLEY
424 150	Mobile unit, 12.5 to 18 kg (1)	404 100	418 013	-	2 m x 1/4" 412 102	413 080	430 000
424 152	Mobile unit, 20 kg (1)	404 100	418 002	-	2 m x 1/4" 412 102	413 080	430 000
424 170	Portable unit, 12.5 to 18 kg (1)	404 100	418 013	-	2 m x 1/4" 412 102	413 080	-
424 170.800	Portable unit, 12.5 to 18 kg (1)	404 100	418 013	417 001	2 m x 1/4" 412 102	413 080	-
424 172	Portable unit, 20 kg (1)	404 100	418 002	-	2 m x 1/4" 412 102	413 080	-
424 172.710	Portable unit, 20 kg (1)	404 100	418 002	417 001	2 m x 1/4" 412 102	413 080	-
482 200	Mobile unit, 12.5 to 20 kg (2)	404 100	-	-	2 m x 1/4" 412 102	413 080	480 021
425 150	Mobile unit, 50 kg drum	407 200	418 004	-	3 m x 1/4" 412 103	413 080	431 000
425 150.002	Mobile unit, 50 kg drum	407 200	418 004	417 002	3 m x 1/4" 412 103	413 080	431 000
425 290	Mobile unit, 50 kg drum	407 200	418 004	-	2 m x 1/4" 412 102	413 080	430 000
482 500	Mobile unit, 50 kg drum (3)	407 200	-	-	3 m x 1/4" 412 103	413 080	480 050
428 243	Mobile unit, 185 kg drum	409 200	418 006	417 004	4 m x 1/4" 412 104	413 080	432 000
428 262	Stationary unit, 185 kg drum	409 200	418 006	417 004	4 m x 1/4" 412 104	413 080	-

- (1) Includes carrying handle 741 602.(2) Shielded unit. Includes base with 4 castors.
- (3) Shielded unit. Includes base with 2 wheels and 2 castors.

Not included options:

239 000: 1/4" BSP (MM) connection adaptor.

240 500: Air filter and pressure regulator, 0-12 bar, 1/4" BSP (FF). **417 001:** Follower plate 298 - 260 mm. For 12.5 and 18 kg pails.

417 002: Follower plate 370 - 330 mm. For 50 kg standard diameter drums. 417 003: Follower plate 405 - 360 mm. For 50 kg large diameter drums.

417 005: Follower plate 340 - 300 mm. For 20 kg pails. 411 100: In-line grease meter for grease control gun.



PUMPMASTER 3 ACCESSORIES

418 004 - 417 003

DRUM COVERS AND FOLLOWER PLATES

Drum covers. Very solid construction. With 2" BSP (F) bung opening.







Follower plates eliminate air pockets and aid pump prime. Rubber flange minimizes waste. With handle for removing from empty drums.

PART No.	DRUM TYPE	DRUM EXTERNAL DIAMETER (MIN MAX.)
417 006	12.5 kg pails	190 - 260 mm
417 001	12.5 to 18 kg pails	260 - 298 mm
417 005	20 kg pails	300 - 340 mm
417 002	50 kg drums	330 - 370 mm
417 003	50 kg drums	360 - 405 mm
417 004	185 kg drums	550 - 590 mm



432 814

DRUM TROLLEYS

430 000 Trolley for 20 kg pails

Two wheel trolley with tubular frame for 20 and 50 kg drums.

431 000 Trolley for 50 and 20 kg drums

Four wheel trolley with tubular frame.

431 001 Trolley for 50 and 20 kg drums

Two wheel and two front rubber pads trolley with tubular frame.

480 050 Mobile protective drum cabinet, 50 kg 480 021 Mobile protective drum cabinet, 20 kg

432 000 Trolley for 185 kg drum

Two solid rubber wheels and one swivelling rubber wheel with brake. A hose reel and a pump can be, mounted using optional bracket.

360 134 Pump bracket

For mounting a short pump to trolley 432 000.

360 135 Hose reel bracket

For mounting a hose reel to trolley 432 000.

432 814 Heavy-Duty trolley for 185 kg drum

Two 260 mm front tires and one swivelling solid rubber wheel with brake. A hose reel can be, mounted using optional bracket.

360 113 Hose reel bracket

For mounting a hose reel to trolley 432 814.



HEAVY-DUTY PISTON PUMPS: THE HEART OF A LUBRICATION SYSTEM



Samoa Heavy-Duty pumps are designed to deliver through long distribution lines or to multiple dispensing points with simultaneous operation all kind of grease at continuous duty and high flow rates under extreme and intensive working conditions.

These double acting, high efficiency, air powered, positive displacement piston pumps provide the necessary confidence to offer solutions for moving fast the required volume of grease with the right pressure in very large distance applications.



Pneumatic air motors. Mechanically driven air motors offer the reliability and dependability required for assuring a non-stalling and superb performance under every working condition. The very simple air valve has no energy consuming springs that could fail due to material fatigue or pneumatic end of stroke sensors that could get to locked because of dirty air.

Air exhaust. The well dimensioned air exhaust design manufactured, in efficient heat dissipation aluminium eliminates erratic pump performance and ice formation at the air exhaust. The air exhaust includes a muffler to reduce noise levels to meet or exceed OSHAS requirements. The muffler can be removed for connecting a hose to the exhaust port for expanding the air to a remote location.

Modular design. Tough modular pump design allows multiple combination assemblies of air motor and lower pump end. This versatile pump construction, for easy service and maintenance, provides a comprehensive range of operating output pressures and flow-rates to meet any amount of grease and pressure demanded in each application.

Pump top gland seal. The anti-corrosive, hardened plunger and the cartridge seals packing arrangements are designed for low friction, to minimize wear and to maximize tightness and seals life.

High quality materials. Aluminium die-cast pneumatic air motor with hard anodized aluminium cylinder; light weight drive piston and plunger with rubber-PTFE or polyurethane seals; cast outlet body, thick-wall polished tube, high tensile steel on rod; barrel, piston and prime valve made of special hardened, precision fitted, ground steel for perfect seal and long life of grease pumps.

Pump inlet valve. SAMOA offers a chopcheck priming valve that assists the entry of heavy and sticky high viscosity grease into the pump and improves pump efficiency. PM45-25:1 ratio pump is double ball valve design pump for the transfer of grease up to NLGI-1.



PUMPMASTER 35 - 60:1 RATIO GREASE PUMPS

530 610

HEAVY-DUTY HIGH PRESSURE PUMPS

Double acting pumps with high pressure and high volume delivery for use in lubrication systems. Pumps can be used with grease up to NLGI-2 consistency. These pumps can be used in medium length systems that include multiple outlets.

Pumps are available for cover mount to 18 kg (35 lb), 50 kg (120 lb) and 185 kg (400 lb) open drums.



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.

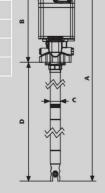
MODELS									
PART No. APPLICATION PUMP TUBE TOTAL WEIGHT HEIGHT WEIGHT									
530 610	185 kg (400 lb) drum	925 mm	1,212 mm	11 kg					
530 620	50 kg (120 lb) drum	730 mm	1,017 mm	10 kg					
530 630	12.5 - 20 kg (40 lb) pails	516 mm	803 mm	9 kg					

TECHNICAL DATA						
Pump pressure ratio	60:1					
Continuous duty flow rate (1)	900 g/min (2 lb/min)					
Maximum free flow	2 kg/min (4.4 lb/min)					
Air pressure operating range	2 to 10 bar (20 to 145 psi)					
Maximum outlet pressure	600 bar (8,700 psi)					
Air motor effective diameter	80 mm (3.15")					
Air motor stroke	80 mm (3.15")					
Air consumption (2)	450 NI/min (15.9 scfm)					
Air inlet	3/8" BSP (F)					
Fluid outlet	3/8" BSP (F)					
Wetted and seal materials	Cast Iron / Hard chromed steel / Steel / UHMWPE / NBR / PTFE / Viton					
Noise level (3)	80 dB					

- (1) Delivery at 80 cycles per minute.
- (?) Bernely at 0 Gyeles I minute. (2) Air consumption at 5 bar (70 psi) air pressure, NLGI-2 grease at 20 °C (68 °F) and 80 cpm. (3) Noise level measured at 1 m (3') from the pump, 7 bar (100 psi) air pressure and free delivery.

Air consumption

DIMENSIONS (mm)								
MODEL	530 610	530 620	530 630					
Α	1,212	1,017	803					
В	287	287	287					
C	35	35	35					
D	925	730	516					
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$								



luid pressure					Cycl	es/min			AIR	CONSUMPTION
0	20	40	60	80	100	120	140	160	180	200
450 6525	$\overline{}$			$\overline{}$				71	oar - (100	psi) 700 + 24.5
400 - 5800	>,			_						600 - 21
350 - 5075	00	0r (100 psi						5 ba	ar (72 psi)	500 + 17.5
300 - 4350	5 bar (Psi			_		3 bar (4	13 psi)	_	300 + 17.3
250 - 3625		- psi)	\sim	_	_					400 - 14
200 - 2900	3 /	1	~	>		-				300 - 10.5
150 -2175	3 bar (4	3 psi)								
100 1450	11		~							200 - 7
50 725	/									100 - 3.5
00 12-										
bar psi g/mi	n									NI/min scfm
09/111	200	400	600	800	1000	1200	1400	1600	1800	2000
0 lb/m	0.44 in	0.88	1.32	1.76	2.2	2.65	3.1	3.53	3.97	4.4

PUMPMASTER 35 - 60 : 1 RATIO GREASE PUMPS



PUMPMASTER 35 - 60:1 RATIO PUMP KITS

534 620 PUMPMASTER 35 - 60:1 ratio pump kit for 50 kg drums

Includes 60:1 ratio pump for 50 kg drums 530 620 with drum cover for 50 kg drum 418 004, HD follower plate for 50 kg drum 417 014 and hose connection kit 534 600.

534 610 PUMPMASTER 35 - 60:1 ratio pump kit for 185 kg drums

Includes 60:1 ratio pump for 185 kg drums 530 610 with drum cover for 185 Kg drum 418 006, follower plate for 185 kg drums 417 012 and hose connection kit 534 600.



PUMPMASTER 35 - 60:1 RATIO PACKAGES FOR 185 KG, 50 KG DRUMS AND 20 & 18 KG PAILS













			The second second second			
	PUMP AND HOSE REEL PACKAGE FOR 185 KG DRUMS	MOBILE PACKAGE FOR 185 KG DRUMS	MOBILE PACKAGE FOR 50 KG DRUMS (1)	MOBILE PACKAGE FOR 50 KG DRUMS	MOBILE PACKAGE FOR 20 KG PAILS (2)	PORTABLE PACKAGE FOR 18 KG PAILS
PART No.	453 612	426 244	486 510	423 160	486 210	423 021
PUMP	530 610	530 610	530 620	530 620	530 630	530 630
DRUM COVER	418 006	418 006	-	418 013	-	418 013
FOLLOWER PLATE	417 012	417 004	-	-	-	417 001
HOSE CONNECTION KIT	534 600	-	-	-	-	-
GREASE GUN WITH Z-SWIVEL	413 080	413 080	413 080	413 080	413 080	413 080
DELIVERY HOSE	15 m Hose reel 504 351	4 m x 3/8" 412 394	3 m x 3/8" 412 393	3 m x 1/4" 412 393	2 m x 3/8" 412 390	2 m x 3/8" 412 390
DRUM TROLLEY		432 000	480 050 (1)	431 000	480 021(2)	-

- (1) Shielded unit. Includes base with 2 wheels and 2 castors.
- (2) Shielded unit. Includes base with 4 castors.

MOBILE EXTRUSION UNIT FOR 12-20 KG PAILS

424 062

Mobile unit specially designed for its use with hard to pump sticky and high viscosity greases (up to NLGI3). The pump's lower end is fixed to an inductor plate and the pump is mounted to a pneumatic piston that elevates the pump for replacing an empty pail. The pneumatic piston also acts when the pump is in use, pushing the inductor plate against the grease, aiding the pump prime, making possible to pump very high viscosity grease.

The unit includes a PM35 - 60:1 pressure ratio pump and it is mounted to a rolling base with 4 wheels, two of them with brake.

424 062 Mobile extrusion unit

Includes 3 m high pressure hose and a grease control gun with Z-swivel and hydraulic nozzle.

424 063 Mobile extrusion unit

Same as model 424 062 but with no outlet hose and grease control gun.

Not included options:

239 001: 1/4" BSP (M) - 3/8" BSP (M) connection adaptor. **240 500:** Air filter and pressure regulator, 1/4" BSP (FF).

360 111: Hose reel pivoting bracket.

360 127: Control gun holder and drip tray.

417 001: Follower plate 298 - 260 mm. For 12.5 kg and 18 Kg pails.

417 002: Follower plate 370 - 330 mm. For 50 kg standard diameter drums.

417 003: Follower plate 405 - 360 mm. For 50 kg large diameter drums.

417 005: Follower pate 340 - 300 mm. For 20 Kg pail. **411 100:** In line grease meter for grease control gun.





SAMOA

PUMPMASTER 35 ACCESSORIES

418 004 - 417 003

DRUM COVERS AND FOLLOWER PLATES

Drum covers. Very solid construction. With 2" BSP (F) bung opening.









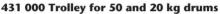
handle for removing from empty drums.

PART No.	DRUM TYPE	DRUM EXTERNAL DIAMETER (MIN MAX.)
417 006	12,5 kg pails	190 - 260 mm
417 001	12,5 to 18 kg pails	260 - 298 mm
417 005	20 kg pails	300 - 340 mm
417 002	50 kg drums	330 - 370 mm
417 003	50 kg drums	360 - 405 mm
417 004	185 kg drums	550 - 590 mm

430 000 - 431 000 - 432 814 - 432 000 DRUM TROLLEYS

430 000 Trolley for 20 kg pails

Two wheel trolley with tubular frame for 20 and 50 kg drums.



Four wheel trolley with tubular frame.

431 001 Trolley for 50 and 20 kg drums

Two wheel and two front rubber pads trolley with tubular frame.

480 050 Mobile protective drum cabinet, 50 kg 480 021 Mobile protective drum cabinet, 20 kg

432 000 Trolley for 185 kg drum

Two solid rubber wheels and one swivelling rubber wheel with brake. A hose reel and a pump can be, mounted using optional bracket.

360 134 Pump bracket

For mounting a short pump to trolley 432 000.

360 135 Hose reel bracket

For mounting a hose reel to trolley 432 000.

432 814 Heavy Duty trolley for 185 kg drum

Two 260 mm front tires and one swivelling solid rubber wheel with brake. A hose reel can be, mounted using optional bracket.

360 113 Hose reel bracket

For mounting a hose reel to trolley 432 814.



HEAVY-DUTY PRESSURE TRANSFER PUMP

531 210

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 very high pressure output and in large distribution systems of high viscosity oils.

Pumps are available with tube length to fit commercial 185 kg - 400 lb drums and they are available for cover mount to 185 kg - 400 lb open drums using a drum cover 418 017.

FLUIDS HANDLED

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

MARKETS SERVED

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

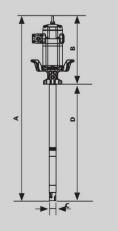
	N	MODELS					
PART No. APPLICATION PUMP TUBE TOTAL HEIGHT							
531 210	185 kg (400 lb) drum	855 mm	1,357 mm	24 kg			
TECHNICAL DATA							
Pump pressure ratio 25:1							
Continuous duty flow rate 6 kg/min (13.2 lb/min)							

3 ()	, ,						
TECHNICAL DATA							
Pump pressure ratio	25:1						
Continuous duty flow rate	6 kg/min (13.2 lb/min)						
Maximum free flow	16 kg/min (35.3 lb/min)						
Air pressure operating range	1.5 - 14 bar (20 - 200 psi)						
Maximum outlet pressure	350 bar (5,000 psi)						
Air motor effective diameter	115 mm (4.5")						
Air motor stroke	100 mm (4")						
Air consumption (1)	1,340 NI/min (47 cfm)						
Air inlet	1/2" BSP (F)						
Fluid outlet	1/2" BSP (F)						
Wetted and seals materials	Cast Iron / Steel / Hard chromed steel / UHMWPE / NBR						
Noise level (2)	80 dB						

- (1) Air consumption at 5 bar air pressure, NLGI-0 grease at 20 °C and 80 cpm. (2) Noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.



NLGI-0,	21 °	C (70	°F) CA	PACIT	Y						
Fluid press	sure				Cycles/	min			AIR	CONSUMPTIO	N
	0	27	54	81	108	135	162	189	216		
200 † 2900						$\overline{}$		1	$\neg \neg$	2500 88	
180 + 2610 160 - 2320		> bar - (To	200					ar - (100 r (72 psi)		2000 -71	
140 + 2030 120 + 1740 100 + 1450		Z (7)	Osij			3 bar	(43 psi)		+	1500 - 52	
80 - 1160 60 - 870	K	bar (43)	25))					+		1000 - 35	
40 - 580	1000					\Rightarrow			+	500 -17	
0 0								>	\mathbf{L}	00	
bar psi	kg /	/min								II/min scfm	
	0	2	4	6	8	10	12	14	16		
utlet pressure r consumption	0 lb/r	4.4 nin	8.8	13.2	17.6	22	26.5	30.9	35.9		



DIMENSIONS (mm)				
531 210				
1.357				
502				
50				
855				





PUMPMASTER 45 - 40:1 RATIO GREASE PUMPS

531 410

IIIIEIIII

HEAVY-DUTY HIGH FLOW PUMPS

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 $50\ kg$ - $120\ lb$ and $185\ kg$ - $400\ lb$ open drums and for horizontal and side mount on grease totes and bags.



• 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	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT			
531 410	185 kg (400 lb) drum	855 mm	1,357 mm	25 kg			
531 420	50 kg (120 lb) drum	650 mm	1,152 mm	22 kg			
531 430*	Bulk tote	490 mm	992 mm	26 kg			

^{*} Includes adaptor 753 110 to fit a 3" cam-lock connector for use in totes and grease bags.

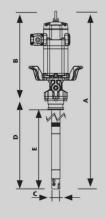
TECHNICAL DATA					
Pump pressure ratio	40:1				
Continuous duty flow rate	3.5 kg/min (7.5 lb/min)				
Maximum free flow	11 kg/min (24.3 lb/min)				
Air pressure operating range	1.5 - 14 bar (20 - 200 psi)				
Maximum outlet pressure	560 bar (8,000 psi)				
Air motor effective diameter	115 mm (4.5")				
Air motor stroke	100 mm (4")				
Air consumption (1)	750 NI/min (26.5 cfm)				
Air inlet	1/2" BSP (F)				
Fluid outlet	1/2" BSP (F)				
Wetted and seals materials	Cast Iron / Steel / Hard chromed steel / UHMW PE / NBR / PTFE				
Noise level (2)	80 dB				

- (1) Air consumption at 5 bar air pressure, NLGI-2 grease at 20 °C and 80 cpm.
- (2) Noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

NLGI-2, 21 °C (70 °F) CAPACITY

DIMENSIONS (mm)							
MODEL	531 410	531 420	531 430*				
Α	1,357	1,152	992				
В	502	502	502				
С	50	50	50				
D	855	650	490				
Е	-	-	410				





Fluid pressure Cycles/min AIR CONSUMPTION 45 90 135 180 225 2000 70 300 † 4351 275 † 3988 275 + 3988 250 + 3625 225 + 3263 200 + 2900 175 + 2538 150 + 2175 125 + 1812 bar - (100 psi) 1800 63 1600 56 1400 50 5 bar (72 1200 42 1000 35 - 3 bar (43 psi) 800 28 125 1812 100 1450 75 1087 50 725 25 362 600 21 400 14 200 7 0 0 bar psi NI/min scfm kg/min 10 13.2 8.8 17.6 22 0 lb/min^{4.4} Outlet pressure Air consumption

HEAVY-DUTY HIGH PRESSURE PUMPS

High pressure double acting pump for use in applications that require extra pressure output or when cold temperatures a 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 50 kg - 120 lb and 185 kg - 400 lb open drum and for horizontal and side mount on grease totes and bags.

FLUIDS HANDLED

• Grease up to NLGI-2.

MARKETS SERVED

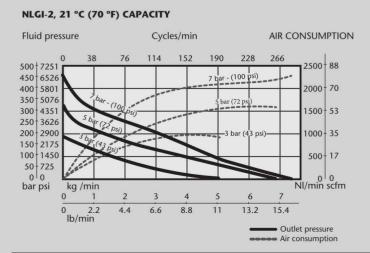
- Heavy-Duty service shops.
- Fleets.
- Lube trucks.
- Mining and construction.
- Rail road and mass transit.
- In-plant.
- Marine.

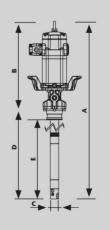
	MODELS							
PART NO.	APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT				
531 710	185 kg (400 lb) drum	855 mm	1,357 mm	25 kg				
531 720	50 kg (120 lb) drum	650 mm	1,152 mm	22 kg				
531 730*	Bulk tote	490 mm	992 mm	21 kg				

^{*} Includes adaptor 753 110 to fit a 3" cam-lock connector for use in totes and grease bags.

TECHNICAL DATA					
Pump pressure ratio	70:1				
Continuous duty flow rate	2 kg/min (4.5 lb/min)				
Maximum free flow	7.5 kg/min (16.5 lb/min)				
Air pressure operating range	1.5 - 7 bar (20 - 100 psi)				
Maximum outlet pressure	490 bar (7,000 psi)				
Air motor effective diameter	115 mm (4.5")				
Air motor stroke	100 mm (4")				
Air consumption (1)	925 NI/min (32.6 cfm)				
Air inlet	1/2" BSP (F)				
Fluid outlet	1/2" BSP (F)				
Wetted and seals materials	Cast Iron / Steel / Hard chromed steel / UHMW PE / NBR / PTFE				
Noise level (2)	80 dB				

- (1) Air consumption at 5 bar air pressure, NLGI-2 grease at 20 °C and and 80 cpm.
- (2) Noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.





DIMENSIONS (mm)							
MODEL	531 710	531 720	531 730*				
Α	1,357	1,152	992				
В	502	502	502				
С	50	50	50				
D	855	650	490				
E	-	-	410				







PUMPMASTER 60 - 12:1 RATIO GREASE PUMP

532 130

HEAVY-DUTY VOLUME TRANSFER PUMP

Moderate pressure, very high volume double acting grease pump for use in transfer applications. These pumps can be used with all type 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 coupler. They can be used with 185 kg - 400 lb drums when mounted to air pneumatic inductor (see "Grease pump kits" section in this chapter.)



• Grease up to NLGI-2.

MARKETS SERVED

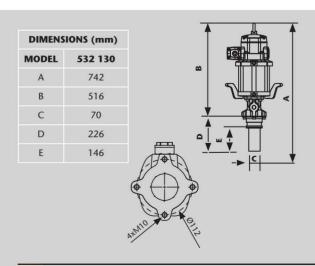
- Mining and construction.
- In-plant grease transfer.
- Rail road and mass transit.

MODELS						
PART NO.	APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT		
532 130*	Bulk tote	226 mm	742 mm	19 kg		

^{*} Includes adaptor 753 110 to fit a 3" cam-lock connector for use in totes and grease bags.

TECHNICAL DATA				
Pump pressure ratio	12:1			
Continuous duty flow rate	15 kg/min (33 lb/min)			
Maximum free flow	40 kg/min (88 lb/min)			
Air pressure operating range	1.5 - 7 bar (20 - 100 psi)			
Maximum outlet pressure	84 bar (1,200 psi)			
Air motor effective diameter	150 mm (6")			
Air motor stroke	100 mm (4")			
Air consumption (1)	1,100 NI/min (39 cfm)			
Air inlet	1/2" BSP (F)			
Fluid outlet	1" BSP (F)			
Wetted and seals materials	Cast Iron / Steel / Hard chromed steel / UHMWPE / NBR / PTFE / Polyurethane			
Noise level (2)	80 dB			

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



Fluid pressure	Cycles/min	AIR CONSUMPTIO
0 20 40 60	80 100 120 140 160	180
90 + 1305		2500 - 88
30 + 1160	7 bar - (100 psi)	_
10 11160 10 1015 10 870 50 870 5 4		2000 - 70
50 - 870 (700 ps/)		
50 - 725 50 - 725 10 580	5 bar (72 psi)	1500 - 53
10 +580 Psi)	3 bar (43 psi)	
10 7 300		1000 - 35
30 435 3 bar (43 psi)		
12.		500 - 17
10 145		
0 0		010
par psi kg /min 0 5 10 15	20 25 30 35 40	45 NI/min scfm
0 11 22 3: lb/min	44 55 66 77 88	99

PUMPMASTER 60 - 80:1 RATIO GREASE PUMPS



HEAVY-DUTY HIGH PERFORMANCE PUMPS

532 810

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 50 kg -120 lb and 185 kg - 400 lb open drum and for side mount on grease totes.

FLUIDS HANDLED

• Grease up to NLGI-2.

MARKETS SERVED

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

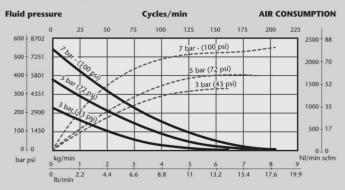
MODELS						
PART No.	APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT		
532 810	185 kg (400 lb) drum	855 mm	1,371 mm	27 kg		
532 820	50 kg (120 lb) drum	650 mm	1,166 mm	24 kg		

TECHNICAL DATA					
Pump pressure ratio	80:1				
Continuous duty flow rate	2.5 kg/min (5.5 lb/min)				
Maximum free flow	8 kg/min (17.6 lb/min)				
Air pressure operating range	1.5 - 7 bar (20 - 100 psi)				
Maximum outlet pressure	560 bar (8,000 psi)				
Air motor effective diameter	150 mm (6")				
Air motor stroke	100 mm (4")				
Air consumption (1)	1,000 NI/min (35 cfm)				
Air inlet	1/2" BSP (F)				
Fluid outlet	1/2" BSP (F)				
Wetted and seals materials	Cast Iron / Steel / Hard chromed steel / UHMW PE / NBR / PTFE				
Noise level (2)	80 dB				

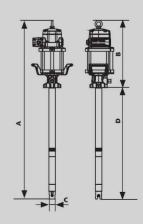
- (1) Air consumption at 5 bar air pressure, NLGI-2 grease at 20 °C and 60 cpm.
- (2) Noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.



NLGI-2, 21 °C (70 °F) CAPACITY



Outlet pressure
Air consumption



DIMENSIONS (mm)						
MODEL	532 810	532 820				
А	1,371	1,166				
В	516	516				
С	50	50				
D	855	650				





PUMPMASTER 45 & 60 INSTALLATION KITS

534 710

PUMPMASTER 45 INSTALLATION KITS

PM45 pump kits for 50 kg and 185 kg drums, totes and grease bins.



	KIT PART No.	PUMP	RATIO	COVER	FOLLOWER PLATE	CONNECTION KIT	CAMLOCK FEMALE	CAMLOCK MALE
50 KG DRUM MOUNTED	534 420	531 420	40:1	418 017	(1)	534 103	+	÷
PUMP KIT	534 720	531 720	70:1	418 017	(1)	534 103		•.
195 NC DDIIM	534 410	531 410	40:1	418 026	417 009	534 103	-	-
185 KG DRUM MOUNTED PUMP KIT	534 710	531 710	70:1	418 026	417 009	534 103		-
POWIP KIT	534 210	531 210	25:1	418 026	417 009	534 103	-	-
TANK SIDE	534 240	531 210	25:1		-	534 103	950 358	753 110
MOUNTED PUMP KIT	534 440	531 410	40:1	-	-	534 103	950 358	753 110
POMP KII	534 740	531 710	70:1	-	-	534 103	950 358	753 110
TANK HORIZONTAL	534 441	531 430	40:1	-	-	534 103	950 358	(2)
MOUNTED PUMP KIT	534 741	531 730	70:1	÷	=	534 103	950 358	(2)

- (1) Use follower plate 417 010 or 417 011 as required. Follower plate not included.
- (2) Included with pump

SAMOA 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.

534 141

PUMPMASTER 60 INSTALLATION KITS

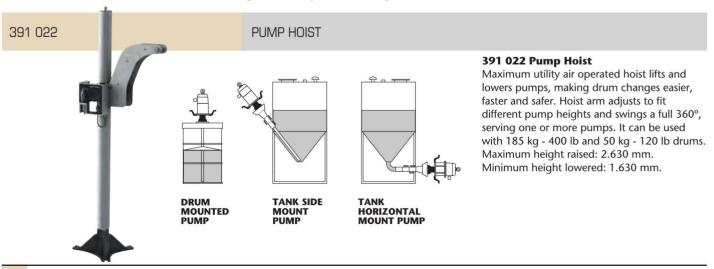
PM60 pump kits for 50 kg and 185 kg drums, totes and grease bins.



	KIT PART No.	PUMP	RATIO	COVER	FOLLOWER PLATE	CONNECTION KIT	CAMLOCK FEMALE	CAMLOCK MALE
50 KG DRUM MOUNTED PUMP KIT	534 820	532 820	80:1	418 017	(1)	534 103	-	-
185 KG DRUM MOUNTED PUMP KIT	534 810	532 810	80:1	418 026	417 009	534 103	-	-
TANK SIDE MOUNTED PUMP KIT	534 840	532 810	80:1	-	-	534 103	950 358	753 110
TANK HORIZONTAL MOUNTED PUMP KIT	534 141	532 130	12:1	-	-	539 009	950 358	(2)

- (1) Use follower plate 417 010 or 417 011 as required. Follower plate not included.
- (2) Included with pump.

SAMOA 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 45 AND 60 GREASE PUMP KITS



PUMP SYSTEMS WITH PNEUMATIC INDUCTOR FOR 185 KG DRUMS

534 721

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 185 kg 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. The inductor system includes guide rods, drum retaining mechanism and a control box with the following features:

- 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.
- Empty drum shut-off safety feature.
- Automatic Vacuum release.

534 421, PM45 - 40:1 pump system with air operated double post inductor for 185 kg drums

Includes pump 531 420.

534 721, PM45 - 70:1 pump system with air operated double post inductor for 185 kg drums

Includes pump 531 720.

534 121, PM60 - 12:1 pump system with air operated double post inductor for 185 kg drums $\,$

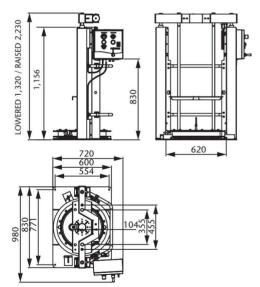
Includes pump 532 130.

 $534\ 821,\ PM60\ -\ 80:1$ pump system with air operated double post inductor for $185\ kg$ drums

Includes pump 532 820.









534 611 - 534 811

PUMPMASTER 35, 45 AND 60 GREASE PUMP KITS

PUMP SYSTEMS WITH PNEUMATIC PUMP HOIST AND GRAVITY INDUCTOR FOR 50 AND 185 KG DRUMS

PUMPMASTER 35, 45 and 60 grease pumps mounted onto a gravity fed follower plate and an air operated pump hoist for use with 185 kg drums.

The air operated pump hoist lifts and lowers the pump, making drums changes easier, faster and safer. The pump lower end is rigidly fixed to a follower plate with a single rubber lip. The weight of the pump, pump bracket and follower plate plus the atmospheric pressure push the assembly against the fluid eliminating channelling and air pocket, keeping lubricant free from contaminants, minimizing waste and aiding pump priming.

$534\,611$, PM35 - 60:1 pump system with pump hoist and gravity follower plate for $185\ kg$ drums

Includes pump 530 610 and hose connection kit Part No. 534 612.

534 621, PM35 - 60:1 pump system with pump hoist and gravity follower plate for 50 kg drums

Includes pump 530 620 and hose connection kit Part No. 534 622.

534 411, PM45 - 40:1 pump system with pump hoist and gravity follower plate for 185 kg drums

Includes pump 531 410 and hose connection kit Part No. 534 414.

534 422, PM45 - 40:1 pump system with pump hoist and gravity follower plate for 50 kg drums

Includes pump 531 420 and hose connection kit Part No. 534 423.

534 711, PM45 - 70:1 pump system with pump hoist and gravity follower plate for 185 kg drums

Includes pump 531 710 and hose connection kit Part No. 534 414.

534 722, PM45 - 70:1 pump system with pump hoist and gravity follower plate for 50 kg drums $\,$

Includes pump 531 720 and hose connection kit Part No. 534 423.

$534\,811$, PM60 - 80:1 pump system with pump hoist and gravity follower plate for $185\,kg$ drums

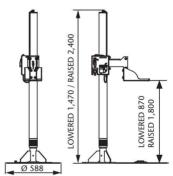
Includes pump 532 810 and hose connection kit Part No. 534 414.

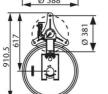
534 822, PM60 - 80:1 pump system with pump hoist and gravity follower plate for 50 kg drums $\,$

Includes pump 532 820 and hose connection kit Part No. 534 423.





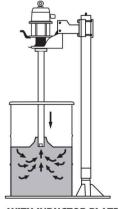




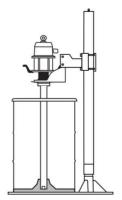
Dimensions in mm



NO INDUCTOR.
AIR POCKETS AND
CHANNELS CAN BE
FORMED.



WITH INDUCTOR PLATE. PUMP IS PERMANENTLY PRIMED.



INDUCTOR PLATES AID TO MINIMIZE WASTE LEFT IN THE DRUM.

GREASE PUMP ACCESSORIES

417 009 - 417 010



418 026 - 418 017





Pump, follower plate, drum cover and drum are not included.

SAMOA

HD DRUM COVERS

For PUMPMASTER 35, 45 and 60 pumps Covers are made from heavy steel gauge to withstand hard usage. Cover flange provides rigidity and maintains solid position on drum. Grease pump mounts in centre of cover with four screws.

PART No.	APPLICATION	MAX MIN. DRUM DIAMETER
418 026*	185 kg - 400 lb	620 - 580 mm
418 017*	50 kg - 120 lb	395 - 350 mm

*Drum cover adaptor required for PM35 pump. Part No. 360 133.

HD FOLLOWER PLATES

For PUMPMASTER 35, 45 and 60 pumps Follower plates eliminate channelling and air pockets, keep lubricant free from contaminants, remove all grease from the drum and aid pump prime.

PART No.	APPLICATION	MAX MIN. DRUM Ø
417 009	185 kg (PM45&60)	590 - 550 mm
417 010	50 kg (PM45&60)	405 - 360 mm
417 011	50 kg (PM45&60)	370 - 330 mm
417 012	185 kg PM35	590 - 550 mm
417 013	50 kg PM35	405 - 360 mm
417 014	50 kg PM35	370 - 330 mm

HOLD DOWN KITS

741 604

Allow to fix a 185 kg or a 50 kg drum to a lube truck bed when used together with drum covers 418 026 and 418 017.

741 604 Hold down kit for 185 kg - 400 lb drums For use with drum cover 418 026. 741 605 Hold down kit for 50 kg - 129 lb drums For use with drum cover 418 017.

AIR AND GREASE CONNECTION KITS

534 600

Includes 1 m x 3/8" air hose (PN 247 710) with 3/8" - 1/2" BSP (MM) connection threads, quick air coupler 251 438, air nipple 255 338, 1.5 m x 3/8" high pressure grease hose (412 392) with 3/8"-1/2" BSP (MM) connection threads

FOR PM45 AND PM60 PUMPS(1)

FOR PM35 PUMPS

534 103

Includes 1.8 m x 1/2" air hose (248 018) with 1/2" BSP (MM) connection threads, elbow 239 352, quick air coupler 251 412, air nipple 255 312, 1.8 m x 1/2" high pressure grease hose (412 202) with 1/2" BSP (MM) connection threads and swivel elbow (945 736) with 1/2" BSP (MF) threads

(1) Hook up kits are valid for all PM45 and PM60 grease pumps except PM60 12:1 pressure ratio pump.

AIR ACCESSORIES

AIR ACCESSORIES	1/4" CONNECTION THREADS 1/4" BSP (FF)	1/2" CONNECTION THREADS 1/2" BSP (FF) WITH ONE 1/2" BSP (M) 3/8" BSP (F) ADAPTOR	3/4" CONNECTION THREADS 3/4" BSP (FF)
AIR PRESSURE REGULATOR 0-12 BAR	240 200	241 201	242 202
COMBINED AIR FILTER AND PRESSURE REGULATOR	240 500	241 501	242 302 (Filter only)
AIR LUBRICATOR	240 400	241 401	242 402
	240 200	241 501	242 202

LOW AND MEDIUM PRESSURE VALVES 950 305 1/4" BSP (FF), 65 bar quarter turn valve

950 320 3/8" BSP (FF), 65 bar quarter turn valve950 300 1/2" BSP (FF), 65 bar quarter turn valve

HIGH PRESSURE VALVES

950 304 1/2" BSP (FF), 500 bar quarter turn valve
950 328 3/4" BSP (FF), 400 bar quarter turn valve
950 329 1" BSP (FF), 350 bar quarter turn valve

AIR LINE SHUTOFF VALVES

950 318 Air valve, 3/8" BSP (FF)

950 319 Air valve, 1/2" BSP (FF)



753 110 - 950 358





CAM-LOCK ADAPTORS

Allow to fix a pump horizontally or vertically to grease bags, totes and other type of containers.

753 110 Male Cam-Lock adaptor

Fixes to the bottom end of the grease pump body. Fits any standard 3" female Cam-Lock connector.

950 358 Female Cam-Lock connector Connection thread 3" BSP (F).

DRUM COVER ADAPTOR



360 133 Drum Cover adaptor

Allows to mount a bung fixed PM35 pump to a flange mount covers 418 026 and 418 017.



GREASE PUMP ACCESSORIES

412 103

GREASE HOSES



Manufactured in NBR with a high density steel reinforcement braid. With two swaged nuts and male-male adaptors on both ends.

412 101, 1 m x 1/4". Working pressure: 400 bar. Connection threads: 1/4" BSP (MM).

412 190, 1.5 m x 1/4". Working pressure: 400 bar. Connection threads: 1/4" BSP (MM).

412 102, 2 m x 1/4". Working pressure: 400 bar. Connection threads: 1/4" BSP (MM).

412 103, 3 m x 1/4". Working pressure: 400 bar. Connection threads: 1/4" BSP (MM).

412 104, 4 m x 1/4". Working pressure: 400 bar. Connection threads: 1/4" BSP (MM).

412 391, 1.5 m x 3/8". Working pressure: 330 bar. Connection threads: 1/4" - 3/8" BSP (MM).

412 392, 1.5 m x 3/8". Working pressure: 330 bar. Connection threads: 3/8" BSP (MM).

412 390, 2 m x 3/8". Working pressure: 330 bar. Connection threads: 1/4" - 3/8" BSP (MM).

412 393, 3 m x 3/8". Working pressure: 330 bar. Connection threads: 1/4" - 3/8" BSP (MM). **412 394**, 4 m x 3/8". Working pressure: 330 bar. Connection threads: 1/4" - 3/8" BSP (MM).

412 202, 1.8 m x 1/2". Working pressure: 275 bar. Connection threads: 1/2" BSP (MM). **412 203**, 3 m x 1/2". Working pressure: 275 bar. Connection threads: 1/2" BSP (MM).

GREASE PUMP MOUNTING ACCESSORIES QUICK REFERENCE CHART

PUMP	PUMPMASTER 3	PUMPMASTER 35		PUMPMASTER 45		PUMPMASTER 60 ⁽¹⁾		
RATIO	55:1	60:1	25:1	40:1	70:1	12:1	80:1	
BUNG ADAPTOR	410 000	609 106	(2)	(2)	(2)	(2)	(2)	
CONNECTION HOSE KIT	412 910	534 600	534 103	534 103	534 103	539 009	534 103	
DRUM COVER 185 KG	418 006	418 006	418 026	418 026	418 026	N/A	418 026	
DRUM COVER 50 KG	418 004	418 004	N/A	418 017	418 017	N/A	418 017	
HD FOLLOWER PLATE 185 KG	417 004	417 012	417 009	417 009	417 009	N/A	417 009	
HD FOLLOWER PLATE 50 KG	417 002	417 014	N/A	417 011	417 011	N/A	417 011	
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 REGULATOR WITH GAUGE	240 200	241 201	241 201	241 201	241 201	241 201	241 201	
AIR FILTER LUBRICATOR	240 500	241 501	241 501	241 501	241 501	241 501	241 501	
FRL	240 000	241 001	241 001	241 001	241 001	241 001	241 001	
AIRLINE SHUTOFF VALVE	950 321	950 319	950 319	950 319	950 319	950 319	950 319	
FLUID SHUTOFF VALVE	950 304	950 304	950 328	950 304	950 304	950 328	950 304	
AIR QUICK COUPLER	253 114	255 338	251 412	251 412	251 412	251 412	251 412	
AIR QUICK CONNECTOR	259 014	251 438	255 312	255 312	255 312	255 312	255 312	
AIR CONNECTION ACCESSORIES I.D.	1/4" - 6 mm	3/8" - 9.5 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⁾ Flange mounted pumps. No bung adaptor for fixing a pump to a 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).

03

AIR OPERATED PUMPS FOR OTHER SERVICE FLUIDS

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