

AIR OPERATED GREASE PUMPS AND KITS

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AIR OPERATED PISTON PUMPS FOR GREASE

Effective greasing demands a pump capable to deliver the pressure required to force grease flow through the very narrow opening in a grease fitting. For this reason, high pressure, high ratio, pumps are used.

Samoa offers a range of high pressure grease pumps to handle a wide variety of applications. The selection of pumps will fit original container sizes and covers applications from mobile and portable units to large centralized systems.

Samoa's grease pumps are designed to provide years of dependable service. The in-line balanced design insures that a maximum amount of energy is directed into the pump. The balanced design provides an even distribution of loads allowing for long seal life. All Samoa pumps have a double acting design, pumping product on both the upstroke and downstroke. An effective priming piston provides positive pump feeding, even when used with high viscosity or tacky greases and a hardened foot valve minimizes pump damage due to dirt. A corrosion proof air motor design tolerates moisture in compressed air.

All Samoa pumps present on demand operation, pump adjusts speed to match system flow and pressure requirements and when the discharge is closed, for example by a closed control valve, then the pump stops. The pump can be left in this stalled condition without damaging the pump nor consuming compressed air.



PUMPMASTER 3/55:1

55:1, pressure ratio pumps designed for mobile and portable units. These are light but powerful pumps with a highly effective pressure ratio. They are the right choice for light applications when high pressure is required. Pumps are available to fit all standard container sizes.



PUMPMASTER 3+3/60:1

60:1, pressure ratio pumps. These are very reliable heavy duty pumps that offer the extra pressure and delivery required for the most demanding applications. They are dependable pumps for use in systems that include distribution lines and hose reels. PumpMaster 3+3 pumps can also be used in mobile and portable applications when high pressure and high flow are required.



PUMPMASTER 6/55:1

55:1, pressure ratio. These are heavy duty pumps for use in large system when high flow and high pressure are required.

PUMPMASTER 3 GREASE PUMPS

PUMPMASTER 3/55:1 PRESSURE RATIO GREASE PUMPS

407 200

High pressure double acting pumps. Light weight and effective high pressure delivery make these pumps the right choice for use in mobile and portable high pressure greasing units. Pumps are available with four different suction tube lengths, to fit all commercial grease drums, from 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	APPLICATION
Grease up to NLGI-2	HIGH PRESSURE, LOW VOLUME GREASE DISPENSING
	MOBILE AND PORTABLE HIGH PRESSURE UNITS
	FLEET SERVICE, GENERAL INDUSTRY, COMMERCIAL, VEHICLES SERVICE FACILITIES, AGRICULTURAL, CONSTRUCTION, MINING

MODELS				
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.
12,5 - 20 kg (40 lb) pails	410 mm	650 mm	3,5 kg (7.2 lb)	404 100
50 kg (120 lb) drums	510 mm	710 mm	3,7 kg (8.3 lb)	405 100
50 kg (120 lb) drums	725 mm	925 mm	4,3 kg (9.5 lb)	407 200
185 kg (400 lb) drums	920 mm	1.120 mm	4,8 kg (10.6 lb)	409 200

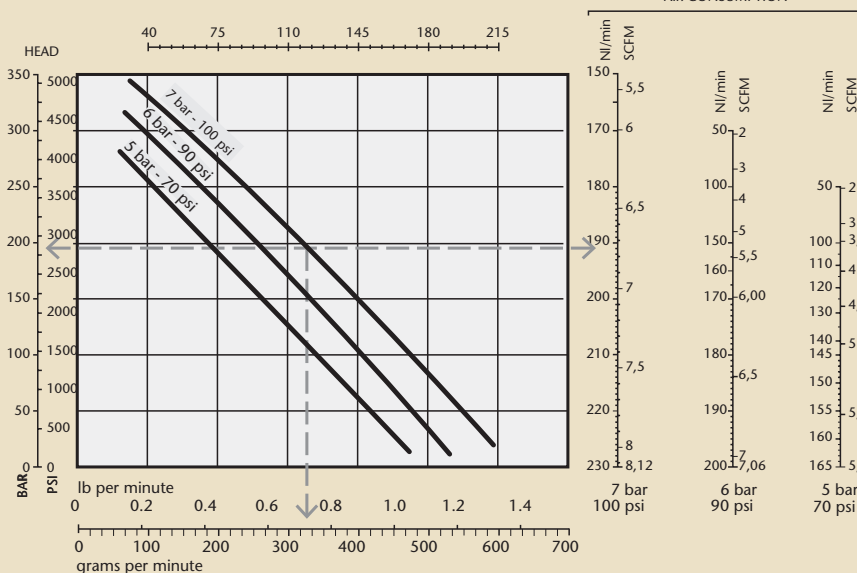
TECHNICAL DATA PRESSURE RATIO 55:1	
Air pressure operating range	3 to 10 bar (40 to 140 psi)
Air consumption (1)	230 NL/min (8.1 cfm)
Maximum fluid outlet pressure	550 bar (7,700 psi)
Air motor diameter	70 mm (2.75")
Air motor stroke	35 mm (1.4")
Number of cycles per minute (2)	150
Maximum free flow delivery (3)	540 gr/min (1.2 lb/min)
Air inlet	1/4" NPSM (F)
Fluid outlet	1/4" NPSM (F)
Wetted and seal materials	Steel / Zinc / NBR / PTFE
Noise level (4)	92 dB

- (1) Maximum air consumption with 7 bar air inlet pressure and free delivery.
- (2) Number of cycles per minute for a flow rate of 200 gr/min (7.1 ounces/min).
- (3) Maximum free delivery at 7 bar. NLGI-2 grease.
- (4) Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

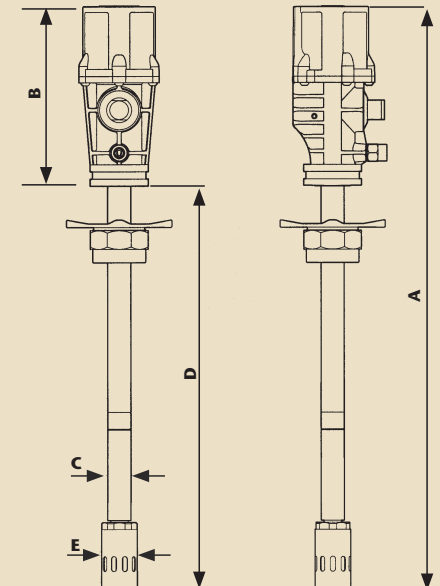


DIMENSIONS (mm)				
MODEL	404 100	405 100	407 200	409 200
A (mm)	650	710	925	1.120
B (mm)	200	200	200	200
C (mm)	26	26	26	26
D (mm)	410	510	725	920
E (mm)	38	38	38	38

NLGI - 2, 20 °C CAPACITY



DIMENSIONS



402 000

PUMPMASTER 3+3/60:1 PRESSURE RATIO GREASE PUMPS



High pressure and high delivery double acting pump. High efficiency pumps that combine high pressure ratio (60:1) and high volume delivery (up to 1.200 gr/min, free delivery). Recommended for use in medium to large distribution systems that include pipe lines, hose reels, etc. and single point dispense systems that require extra pressure and extra delivery. Very reliable pump, includes a removable screen filter at the grease intake area, for eliminating dirt and impurities that could damage the pump, and a built in filter at the air inlet connection. Include a height adjustable 2" BSP (M) bung adaptor.

FLUIDS HANDLED	APPLICATION
Grease up to NLGI-2	HIGH PRESSURE, HIGH VOLUME GREASE DISPENSE
	CENTRALIZED GREASE DISTRIBUTION SYSTEMS
	MOBILE AND PORTABLE HIGH PRESSURE UNITS
	FLEET SERVICE, GENERAL INDUSTRY, HEAVY DUTY AND COMMERCIAL VEHICLES, AGRICULTURAL, MINING, CONSTRUCTION, TRAINS, ETC.

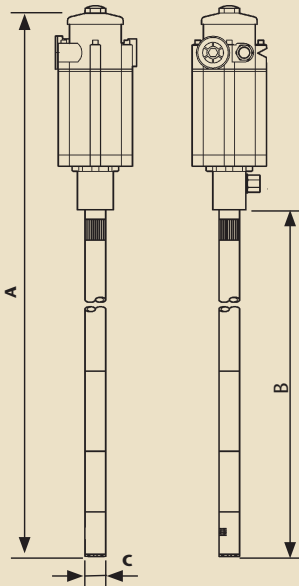
MODELS				
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.
12,5 - 20 kg (40 lb) pails	516 mm	804 mm	6,5 kg (14.3 lb)	402 050
50 kg (120 lb) drum	730 mm	1.020 mm	7,5 kg (16.6 lb)	402 000
185 kg (400 lb) drum	925 mm	1.215 mm	8,5 kg (18.7 lb)	402 025

TECHNICAL DATA PRESSURE RATIO 55:1	
Air pressure operating range	3 to 10 bar (40 to 140 psi)
Air consumption (1)	650 NL/min (22.9 cfm)
Maximum fluid outlet pressure	600 bar (8,400 psi)
Air motor diameter	75 mm (3")
Air motor stroke	75 mm (3")
Number of cycles per minute (2)	98
Maximum free flow delivery (3)	1.200 gr/min (2.6 lb/min)
Air inlet	3/8" NPSM (F)
Fluid outlet	3/8" NPSM (F)
Wetted and seal materials	Steel / Zinc / NBR / PTFE / Polyurethane
Noise level (4)	92 dB

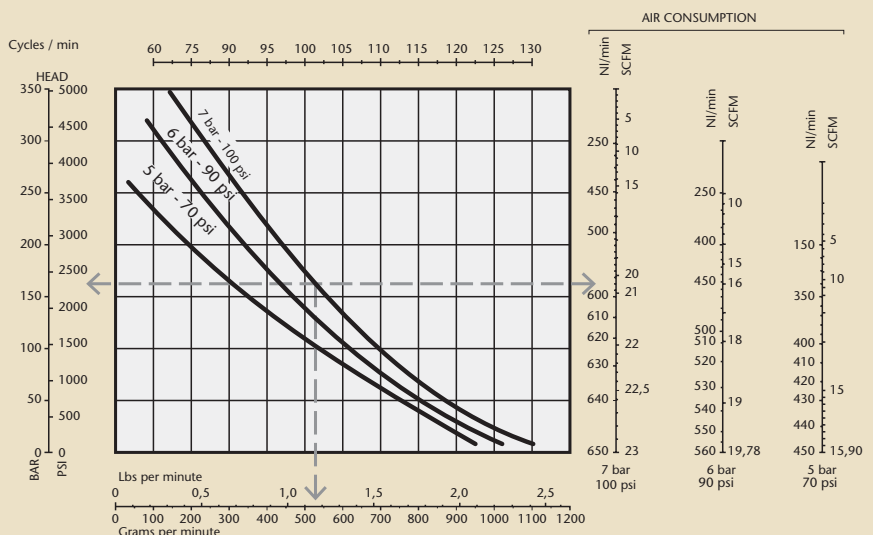
DIMENSIONS (mm)			
MODEL	402 050	402 000	402 025
A (mm)	804	1.020	1.215
B (mm)	516	730	925
C (mm)	30	30	30

(1) Maximum air consumption with 7 bar air inlet pressure and free delivery. (2) Number of cycles per minute for a flow rate of 500 gr/min (1.1 lb/min). (3) Maximum free delivery at 7 bar. NLGI-2 grease. (4) Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

DIMENSIONS



NLGI - 2, 20 °C CAPACITY



PUMPMASTER 6 GREASE PUMPS

PUMPMASTER 6/55:1 PRESSURE RATIO GREASE PUMP

401 025

Heavy Duty high pressure and high delivery pump. Long stroke pump, requires a small number of cycles to deliver enough volume of grease required in most applications. Recommend use in large systems that include pipe lines, hose reels, etc.

Very reliable double acting pump, includes a removable screen filter at the grease intake area for eliminating dirt and impurities that could damage the pump.

Pumps are available to fit 50 kg (120 lb) and 185 kg (440 lb) open drums. Pumps mount to a drum cover through a flange (2" BSP (M) bung adaptor available as an option, PN 410 001).

FLUIDS HANDLED	APPLICATION
Grease up to NLGI-2	HIGH PRESSURE, HIGH VOLUME GREASE DISPENSE SYSTEMS
	FLEET SERVICE, GENERAL INDUSTRY, HEAVY DUTY AND COMERCIAL VEHICLES SERVICE, MINIG, CONSTRUCTION, TRAINS, ETC.

MODELS				
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART NO.
50 kg (120 lb) drum	640 mm	1.135 mm	15,3 kg (33.71 lb)	401 000
185 kg (400 lb) drum	835 mm	1.330 mm	16,8 kg (37 lb)	401 025

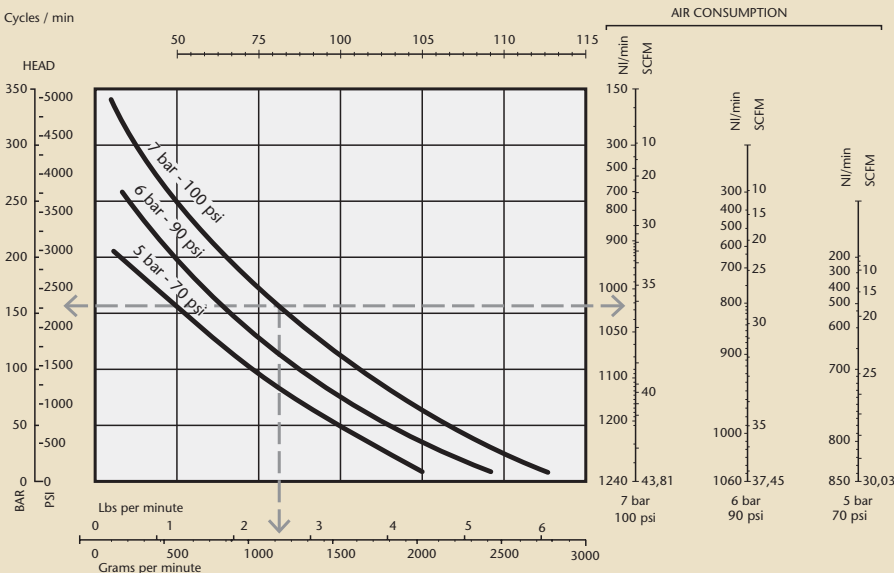
TECHNICAL DATA PRESSURE RATIO 55:1	
Air pressure operating range	3 - 10 bar (40 to 140 psi)
Air consumption (1)	1.240 NL/min (43.8 cfm)
Maximum fluid outlet pressure	550 bar (7,700 psi)
Air motor diameter	160 mm (6.3")
Air motor stroke	110 mm (4.3")
Number of cycles per minute (2)	104
Maximum free flow delivery (3)	3.000 gr/min (6.6 lb/min)
Air inlet	1/2" NPSM
Fluid outlet	3/8" NPSM
Wetted and seal materials	Steel / Zinc / NBR / PTFE / Polyurethane
Noise level (4)	82,5 dB

- (1) Maximum air consumption with 7 bar air inlet pressure and free delivery.
- (2) Number of cycles per minute for a flow rate of 2 kg/min (4.4 lb/min).
- (3) Maximum free delivery at 7 bar. NLGI-2 grease.
- (4) Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

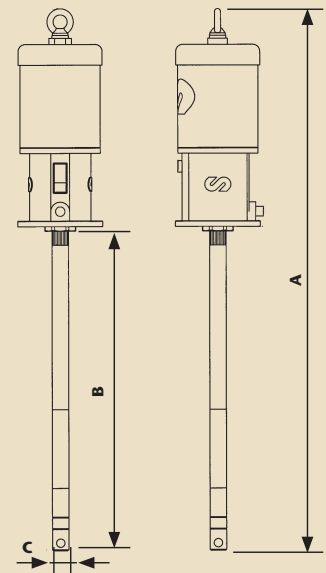


DIMENSIONS (mm)		
MODEL	401 000	401 025
A (mm)	1.135	1.330
B (mm)	640	835
C (mm)	35	35

NLGI - 2, 20 °C CAPACITY



DIMENSIONS



PUMP CONNECTION KITS

GREASE PUMP AND CONNECTION KITS

429 800

429 900



PUMPMaster 3+3 GREASE PUMP KITS

412 920 PumpMaster 3+3 pump connection kit**Includes:**

- 247 710: Air hose, 1,0 m 3/8" BSP (M) - 1/2" BSP (M).
- 251 438 : Automatic quick air coupling 3/8" BSP (F).
- 255 338: Quick air coupling 3/8" BSPT (M).
- 412 392: 1,5 m x Ø 3/8" grease hose, 1/2" BSP (M) - 3/8" BSP (M).

412 930 PumpMaster 6 pump connection kit**Includes:**

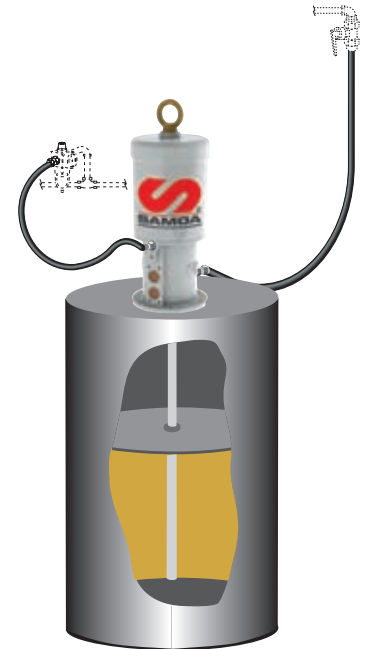
- 362 100: 1 m air hose with 1/2" BSP (MM).
- 252 112: Automatic quick air coupling 1/2" BSP (F).
- 256 012: Quick air coupling 1/2" BSPT (M).
- 412 392: 1,5 m Ø 3/8" grease hose, 1/2" BSP (M) - 3/8" BSP (M).

429 810 PumpMaster 3+3 grease pump kit for 50 kg drums**Includes:**

- 402 000: PumpMaster 3+3 high pressure grease pump with bung adaptor.
- 418 004: Drum cover for 50 kg drums.
- 412 920: PumpMaster 3+3 connection kit.

429 800 PumpMaster 3+3 grease pump kit for 185 kg drums**Includes:**

- 402 025: PumpMaster 3+3 high pressure grease pump with bung adaptor.
- 418 006: Drum cover for 185 kg drums.
- 417 004: Follower plate for 185 kg drums.
- 412 920: PumpMaster 3+3 connection kit.



PUMPMaster 6 GREASE PUMP KIT

429 900 PumpMaster 6 grease pump kit for 185 kg drums**Includes:**

- 401 025: PumpMaster 6 high pressure grease pump.
- 418 026: Drum cover for 185 kg drums.
- 417 004: Follower plate for 185 kg drums.
- 412 930: PumpMaster 6 connection kit.

Recommended options for PM 3+3 pumps:

- 240 500** Air filter + regulator 1/4" BSP (FF).
- 240 000** Air filter + regulator + lubricator 1/4" (FF).
- 950 304**, 1/2" BSP (FF) high pressure (500 bar) ball valve.
- 239 000**, 1/4" BSPT (MM) connection adaptor.

Recommended options for PM 6 pumps:

- 241 501** Air filter + regulator 3/8" BSP (F) - 1/2" BSP (F).
- 241 001** Air filter + regulator + lubricator 3/8" BSP (F) - 1/2" BSP (F).
- 950 304**, 1/2" BSP (FF) high pressure (500 bar) ball valves.
- 239 004**, 1/2" BSPT (MM) connection adaptor.

GREASE PUMP ACCESSORIES

INDUCTOR PLATE FOR 185 KG DRUMS

424 000

Air operated twin cylinder pump hoist for use with high viscosity and fibrous hard to pump greases. The inductor plate raises the pump and follower plate facilitating replacing an empty drum. The cylinders also exert downward force, pushing the pump and the follower plate in to the fluid aiding pump prime and minimizing material waste.

Features:

- Automatic shut off valve on the follower plate, stops the pump when the drum is empty.
- Two Ø 80 mm air cylinders, which greatly improves the input of fibrous and high viscosity greases into the pump, even at low temperatures.
- Air control box, with two air pressure regulators, one for pump control and the other for hoist control, lever valve for hoist up/down control and on/off push button for pump control.
- Heavy Duty two-lip aluminum follower plate with bleeder rod.

Dimensions:

830 x 600 x 1.320 mm (lowered).

830 x 600 x 2.230 mm (raised).

391 000 Twin cylinder inductor plate for 185 Kg drums**424 000 Twin cylinder inductor plate with PM6, 55:1 pump for 185 Kg drums**

DRUM COVERS

360 125 - 418 004

Very solid construction. With 2" BSP (F) thread for the pump bung adaptor.

PART No.	DRUM TYPE	DRUM EXT. Ø (MAX - MIN)	PUMP FIXATION
418 013	12,5 - 18 kg pails	310 - 265 mm	2" BSP (F)
418 002	20 kg pails	330 - 285 mm	2" BSP (F)
418 016	50 kg drums	395 - 350 mm	2" BSP (F)
418 004	50 kg drums	405 - 360 mm	2" BSP (F)
418 006	185 kg drums	610 - 565 mm	2" BSP (F)
418 026	185 kg drums	620 - 580 mm	2 x (4 x Ø 9 mm)

Drum cover accessories

741 602: Carrying handle (for covers PN 418 013 and PN 418 002).

360 125: Grease gun holder for drum covers.



FOLLOWER PLATES

417 003

Eliminates air pockets and aids pump prime. Rubber flange minimizes waste. With handle for easy removal from empty drums.

PART No.	DRUM TYPE	DRUM EXT. Ø (MAX - MIN)	PUMP TUBE Ø (MAX - MIN)
417 006	12,5 kg pails	260 - 190 mm	42 - 26 mm
417 001	12,5 - 18 kg pails	298 - 260 mm	42 - 26 mm
417 005	20 kg pails	340 - 300 mm	42 - 26 mm
417 002	50 kg drums	370 - 330 mm	42 - 26 mm
417 003	50 kg drums	405 - 360 mm	42 - 26 mm
417 004	185 kg drums	590 - 550 mm	42 - 26 mm



AIR LINE ACCESSORIES

**For PumpMaster 3 and PumpMaster 3+3 pumps**

240 200 Air pressure regulator 0 - 12 bar 1/4" BSP (FF).

240 400 Air lubricator 1/4" BSP (FF).

241 401 Air lubricator

1/2" BSP (F) - 3/8" BSP (F).

240 500 Combined air filter and pressure regulator 1/4" BSP (FF).

For PumpMaster 6 pumps

240 201 Air pressure regulator, 0 - 12 bar 1/4" BSP (FF).

241 401 Air lubricator

1/2" BSP (F) - 3/8" BSP (F).

241 501 Combined air filter and pressure regulator 1/2" BSP (F) - 3/8" BSP (F).

Air hoses**For PumpMaster 3 and 3+3 pumps**

246 006, 0,6 m - 1/4" BSP (MM).

246 010, 1,0 m - 1/4" BSP (MM).

246 015, 1,5 m - 1/4" BSP (MM).

For PumpMaster 6 pumps

362 100, 1,0 m, 1/2" BSP (MM).

362 101, 1,5 m, 1/2" BSP (MM).

Connection adapters for PumpMaster 3, PumpMaster 3+3 and PumpMaster 6 pumps

239 000, 1/4" BSP (M) x 1/4" BSP (M).

945 516, 1/2" BSP (M) x 1/4" BSP (F).

239 002, 3/8" BSP (M) x 3/8" BSP (M).

239 004, 1/2" BSP (M) x 1/2" BSP (M).

Air valves

950 321, 1/4" BSP (FF).

950 318, 3/8" BSP (FF).

950 319, 1/2" BSP (FF).

950 302, 1/4" BSP (FF), needle valve.



GREASE PUMP ACCESSORIES

GREASE HOSES AND VALVES



High pressure, nitrile rubber hoses reinforced with 2 high density steel braids. Swaged fittings with swivelling nut and adaptors on both ends.

PART No.	LENGTH	INTERNAL Ø	FITTING THREADS	WORKING PRESSURE
412 101	1,0 m	1/4"	1/4" BSP (MM)	350 bar (5,000 psi)
412 190	1,5 m	1/4"	1/4" BSP (MM)	350 bar (5,000 psi)
412 102	2,0 m	1/4"	1/4" BSP (MM)	350 bar (5,000 psi)
412 103	3,0 m	1/4"	1/4" BSP (MM)	350 bar (5,000 psi)
412 104	4,0 m	1/4"	1/4" BSP (MM)	350 bar (5,000 psi)
412 106	6,0 m	1/4"	1/4" BSP (MM)	350 bar (5,000 psi)
412 108	8,0 m	1/4"	1/4" BSP (MM)	350 bar (5,000 psi)
412 110	10,0 m	1/4"	1/4" BSP (MM)	350 bar (5,000 psi)
412 112	12,0 m	1/4"	1/4" BSP (MM)	350 bar (5,000 psi)
412 115	15,0 m	1/4"	1/4" BSP (MM)	350 bar (5,000 psi)
412 391	1,5 m	3/8"	1/4" BSP (M) x 3/8" BSP (M)	280 bar (4,000 psi)
412 392	1,5 m	3/8"	3/8" BSP (M) x 1/2" BSP (M)	280 bar (4,000 psi)

VALVES

PART No.	CONNECTION THREADS	WORKING PRESSURE
950 304	1/2" BSP (FF)	500 bar (7,140 psi)

BUNG ADAPTORS
410 001 - 360 133

2" BSP (F) connection thread, with split collar to clamp the pump tube, adjusts to all drum covers except for cover 418 026 that requires converter 360 133.

PART No.	APPLICATION	INTERNAL JAW Ø
410 000	PumpMaster 3 pumps	26 mm
410 002	PM 3+3 pumps	30 mm
410 001	PumpMaster 6 pumps	35 mm

360 133, 2" BSP (F)
converter plate for drum cover 418 026

CONNECTION ADAPTORS

Required to connect high pressure hoses to the pump.

PART No.	CONNECTION THREAD
945 590	1/4" BSP (MM)
945 591	3/8" BSP (M) - 1/4" BSP (M)
945 592	3/8" BSP (MM)
945 593	1/2" BSP (MM)
945 554	3/4" BSP (M) - 1/2" BSP (M)
945 557	1/2" BSP (M) - 3/8" BSP (M)
945 556	1/2" BSP (M) - 3/8" BSP (F)
945 516	1/2" BSP (M) - 1/4" BSP (F)