

SAMOA QUALITY

or more than 50 years Samoa has been manufacturing equipment for the lubrication professional. Our extensive program, fully designed and manufactured in Samoa's own facilities, ranges from grease fittings and hand operated equipment to air operated pumps, hose reels, control guns, meters, waste oil and other fluid collection systems and fluid dispense and inventory control systems. Our products are present in more than 100 countries in the five continents and are used in all kinds of industries and environments.

Samoa lubrication products are engineered to meet the most demanding requirements and have become the quality reference in many markets.

Located on the northern Spanish coast, Samoa's manufacturing facilities are modern and are equipped with the latest state-of-the-art production equipment and technology. We are committed to manufacturing excellence, environmental sustainability and a healthy and safe workplace. Our facilities and work processes are subsequently ISO - 9001: 2000, ISO 14001 and OSHAS 18001 certified.

Product Research and Development is a fundamental part of Samoa's philosophy. We are in permanent contact with the market to identify new needs that we satisfy with product improvements and new products. Our continuous product improvement ensures that our products meet the requirements of worldwide in even the most demanding applications.

Our products are available through a selected network of knowledgeable distributors. This network provides a sales and consulting service to identify the products that would best meet your needs, and when required after sales service to ensure a long and satisfactory use of our equipment.



LUBRICATION EQUIPMENT MARKETS AND APPLICATIONS

ubrication and fluid handling equipment are used in multiple applications in different industries. A wide variety of vehicles, machines and industrial processes require regular—lubrication maintenance to ensure their correct operation.

The products shown in this catalogue offer a complete range of solutions to satisfy almost every need to transfer, dispense and dose lubricants and other service fluids. They range from manual high pressure greasing and fluid transfer products to complete electronically controlled distribution systems in vehicle maintenance centres and automatic fluid distribution and dosing systems for production and assembly lines.

AUTOMOTIVE AND COMMERCIAL VEHICLES

Service fluids handling and inventory management systems for:

Franchised car and commercial vehicle dealers and independent car and commercial vehicle workshops

Petrol stations and quick maintenance centres

Bus and taxi maintenance centres

Municipal vehicle maintenance facilities

Freight fleets

Private carrier fleets.

FLUIDS HANDLED

Mineral and synthetic based motor oil, gear oil, hydraulic oil, etc.

Grease

Transmission fluid

Coolant and antifreeze solutions

Windshield wash solutions

Low and high pressure water

Diesel

AdBlue (DEF)

Compressed air.

PRODUCTS USED

Air operated piston pumps for oil and grease

Diaphragm pumps for antifreeze, coolant and windshield wash solutions, AdBlue (DEF) and waste oil transfer and evacuation

Electric pumps for oil and diesel

Hose reels

Hose end meters, delivery guns and high pressure greasing guns

Fluid and inventory management systems

Mobile and stationary equipment for waste oil collection

Service accessories (hand pumps, bucket pumps, measures, shop furniture, etc.)





MINING AND CONSTRUCTION

Service fluids handling and inventory management systems for: Above and underground vehicle maintenance facilities Construction equipment maintenance centres. Remote service centres: lube and service trucks.

FLUIDS HANDLED

Mineral and synthetic based motor oil, gear oil, hydraulic oil, etc. Grease
Transmission fluid
Coolant and antifreeze solutions
Low and high pressure water
Diesel
AdBlue (DEF)
Compressed air.

PRODUCTS USED

Air operated piston pumps for oil and grease
Diaphragm pumps for antifreeze, coolant and windshield wash solutions, AdBlue (DEF) and waste
oil transfer and evacuation
Electric pumps for oil and diesel
Hose reels
Hose end meters, delivery guns and high pressure greasing guns
Fluid and inventory management systems
Mobile and stationary equipment for waste oil collection
Service accessories (hand pumps, bucket pumps, measures, shop furniture, etc.)





INDUSTRIAL

Fluid handling and inventory management systems for:

Any manufacturing plant that uses lubricants (hydraulic oil, gear oil, soluble oil, etc.) and/or grease for machinery maintenance,

Any manufacturing or assembly process that consumes lubricants or grease as part of this process.

FLUIDS HANDLED

Mineral and synthetic based motor oil, gear oil, hydraulic oil, soluble oil, etc.

Grease

Transmission fluid

Coolant and antifreeze solutions

Low and high pressure water

Compressed air.

PRODUCTS USED

Air operated piston pumps for oil and grease

Diaphragm pumps for antifreeze, coolant and waste fluids transfer and evacuation

Electric pumps for oil

Hose reels

Hose end meters, delivery guns and high pressure greasing guns

Fluid and inventory management systems.

Batch preset and dosing systems

Service accessories (hand pumps, bucket pumps, measures, shop furniture, etc.)





OTHER MARKETS

Agriculture: vehicle and machinery maintenance Aviation: airplane and auxiliary vehicle maintenance

Marine: marine engine maintenance Railroad: general maintenance

FLUIDS HANDLED

Mineral and synthetic based motor oil, gear oil, hydraulic oil, etc.

Grease

Transmission fluid

Coolant and antifreeze solutions

Low and high pressure water

Diesel

AdBlue (DEF)

Compressed air

PRODUCTS USED

Air operated piston pumps for oil and grease

Diaphragm pumps for antifreeze, coolant and windshield wash solutions, AdBlue (DEF) and waste

oil transfer and evacuation

Electric pumps for oil and diesel

Hose reels

Hose end meters, delivery guns and high pressure greasing guns

Fluid and inventory management systems

Mobile and stationary equipment for waste oil collection

Service accessories (hand pumps, bucket pumps, measures, shop furniture, etc.)



01	AIR OPERATED OIL PUMPS AND KITS	
	AIR OPERATED PISTON PUMPS FOR OIL AND LUBRICANTS PUMPMASTER 2 OIL PUMPS PUMPMASTER 4 OIL PUMPS PUMPMASTER 6 OIL PUMPS OIL PUMP KITS OIL PUMP ACCESSORIES	. 12 . 14 . 17
02	AIR OPERATED GREASE PUMPS AND KITS	
	AIR OPERATED PISTON PUMPS FOR GREASE PUMPMASTER 3 GREASE PUMPS PUMPMASTER 3+3 GREASE PUMPS PUMPMASTER 6 GREASE PUMPS GREASE PUMP AND CONNECTION KITS GREASE PUMP ACCESSORIES	. 27 . 28 . 29
03	AIR OPERATED PUMPS FOR OTHER SERVICE FLUIDS	
	AIR OPERATED DOUBLE DIAPHRAGM PUMPS DF 50 METALLIC PUMPS DF 50 MIXING PUMPS DF 50 NON METALLIC PUMPS DF 100 METALLIC PUMPS PUMPMASTER 1 PUMP PUMPMASTER 2 SUCTION PUMP PUMPMASTER 2 PUMPS PUMPMASTER 4 PUMPS	. 37 . 38 . 39 . 40 . 41 . 41
04	HOSE REELS	
	HOSE REELS GENERAL INFORMATION . 501 SERIES DOUBLE PEDESTAL ARM HOSE REELS . 502 SERIES INDIVIDUALLY ENCLOSED HOSE REELS . 504 SERIES DOUBLE PEDESTAL HOSE REELS . 505 SERIES HIGH CAPACITY HOSE REELS . 506 SERIES SINGLE ARM HOSE REELS . HOSE SPECIFICATIONS . COMPACT REELS FOR AIR AND CABLE . HOSE REEL MOUNTING ACCESSORIES . HOSE REEL KITS . SINGLE ARM HOSE REEL KITS	. 45 . 46 . 47 . 48 . 50 . 51 . 52
05	METERING AND CONTROL EQUIPMENT	
	OIL CONTROL GUNS FLUID CONTROL GUN, OIL BAR GREASE CONTROL GUNS HOSE END METERS FOR OIL HOSE END METERS FOR GREASE AND OTHER SERVICE FLUIDS IN-LINE METERS CONTROL GUN AND HOSE END METER ACCESSORIES ADVANCED MONITORING SYSTEM INVENTORY MANAGEMENT CONSOLE TANK ALERT AND TANK MANAGEMENT SYSTEMS	. 57 . 58 . 59 . 61 . 62 . 63

06	MOBILE UNITS
	MOBILE GREASE UNITS WITH PUMPMASTER 3 PUMPS
07	STATIONARY PUMP PACKAGES GREASE AND OIL
	PUMPMASTER 3 GREASE PUMP PACKAGES
08	WASTE OIL EQUIPMENT
	WASTE OIL GRAVITY RECEIVERS, 100 LITRES WASTE OIL GRAVITY RECEIVERS, 70 LITRES WASTE OIL SUCTION UNITS, 100 LITRES WASTE OIL SUCTION UNITS, 24 LITRES AND 70 LITRES COMBINED WASTE OIL SUCTION AND GRAVITY UNITS, 100 LITRES COMBINED WASTE OIL SUCTION AND GRAVITY UNITS, 70 LITRES SPECIAL WASTE OIL AND COOLANT AND COOLANT GRAVITY RECEIVERS WASTE OIL EVACUATION PUMP KIT AND ACCESSORIES EVACUMASTER WASTE OIL SUCTION UNIT AUTOVAC WASTE OIL SUCTION SYSTEM WASTE OIL EQUIPMENT ACCESSORIES 102 EVACUMASTER AND AUTOVAC ACCESSORIES 103 EVACUMASTER AND AUTOVAC ACCESSORIES
09	ELECTRIC PUMPS FOR OIL AND DIESEL
	DC DIESEL PUMPS
	AC OIL PUMPS

10	LUBRICATION AND FLUID HANDLING. PRODUCTS AND ACCESSORIES
	GREASE NIPPLES
	GREASE CONNECTORS AND NOZZLES
	GREASE COMPRESSORS AND BUCKET PUMPS
	DRUM PUMPS FOR VARIOUS FLUIDS
	AIR TREATMENT UNITS (FRLs)
11	WORKSHOP FURNITURE
	WORK BENCHES
	ACCESSORIES
	PART NUMBER INDEX
	PART NUMBER INDEX

01

AIR OPERATED OIL PUMPS AND KITS

AIR OPERATED PISTON PUMPS FOR OIL AND LUBRICANTS	10
PUMPMASTER 2 OIL PUMPS	12
PUMPMASTER 4 OIL PUMPS	14
PUMPMASTER 6 OIL PUMPS	17
DIL PUMP KITS	18
ALL PLIMP ACCESSORIES	22





all starts with the pump; the heart of the system. The choice of a pump requires a wide variety of factors to be considered so that your system will provide years of dependable service. Samoa has engineered a broad offering of oil pumps to handle a wide variety of applications. This range of pumps will fit original container sizes and bulk storage tanks; covering applications ranging from the transfer of oil to very large centralized systems.

WHY CHOOSE AN AIR OPERATED PUMP?

Compressed air provides the best power source because it allows the pump to stall against fluid back pressure. When the dispense handle is opened, the fluid pressure drops in the system, the pump automatically starts and oil flows. When the dispense handle is closed, back pressure is created in the system. When the amount of back pressure equals the force of the compressed air pushing on the pump, the system stops or stalls. When using other power sources such as electric or hydraulic, the system must have pressure sensing switches, bypass loops and relief valves, or other methods to control the motor and pressure.

BALANCED PISTON PUMP - DIFFERENTIAL AIR MOTOR

Samoa's oil 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 oil pumps have a double acting design, pumping product on both the upstroke and the downstroke.

The differential air motor has proven to be the most durable design for oil pumps. This simple yet effective method to create the air motor reciprocating motion, requires very few moving parts and works well even with adverse compressed air supply conditions.

PRESSURE AND VOLUME

An important, and often confusing, aspect of selecting a pump is how to determine which pump ratio and what pump size to select. The pump ratio is calculated by dividing the surface area of the air motor piston by the surface area of the fluid piston. Fluid pressure is determined by multiplying the pump ratio by the compressed air pressure. This determines

the fluid pressure at the fluid outlet of the pump. Fluid pressure is required to get the oil from the pump outlet to the dispense point. Restrictions such as the length and diameter of pipes, hoses, hose reels, solenoid valves, pulse meters, control handles, and other system components create friction in the system. Sufficient fluid pressure is required to overcome this friction, in order to get the oil to the dispense point.

Pump size determines the amount of fluid flowing through the piston pump outlet during each cycle of the pump. Three different sizes of pumps with the same ratio will each deliver a different flow rate. A variety of factors help determine the pump size to choose for your system. How many dispense points will be operating at the same time? What kind of work will you be doing; filling a crankcase or filling a hydraulic reservoir?, etc.







PUMP MASTER 2

These pumps are high efficiency air operated pumps specifically designed for lubricant transfer, oil distribution packages and small systems. They have an innovative air motor with a patented air valve. The air valve provides the pump with a very fast reciprocating action that contributes to improved pump performance. The air motor's unique design avoids the dead volumes present in most air motors and overall air consumption is reduced by up to 40%.

PUMP MASTER 4

These heavy duty air operated pumps are designed for lubricant distribution systems. Their proven highly reliable air motor and high performance pump makes this pump family the preferred choice in the most demanding oil distribution systems.

Pump Master 4 air motors have a built in port for placing a pressure relief valve to prevent damage in the system caused by over pressure due to oil thermal expansion.

PUMP MASTER 6

These pumps are high performance, high pressure pumps for applications with long piping distances, cold temperatures or when low air pressure would limit pump performance.

Severe duty construction for maximum reliability.







PUMPMASTER 2 OIL PUMPS

351 120

DIMENSIONS MODEL

A (mm)

B (mm)

C (mm)

D (mm)

OIL PUMPS, PRESSURE RATIO 1:1

Double acting air operated low pressure pumps for transferring lubricants and other non-corrosive fluids. Pumps include height adjustable bung adaptor 2" BSP (M) for tank or drum mounting.

Typically used in all types of industries for fast and clean transfer of lubricants.



PRODUCTS HANDLED

- Synthetic and mineral based lubricants.
- Transmission Fluid.
- Hydraulic oil.
- Diesel.
- Grease up to NLGI-2 (long pump only).

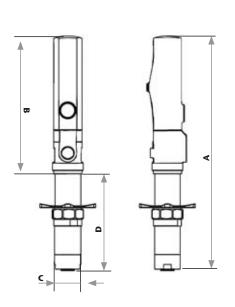
MARKETS

- Vehicle maintenance centres.
- Fleet service facilities.
- Manufacturing plants.
- Agriculture.
- Marine.
- Mining and construction.

MODELS					
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.	
Wall mounted, stub pump	215 mm	500 mm	2.5 Kg	351 120	
200 l (55 gal) drum	915 mm	1,200 mm	4.8 Kg	352 120	

TECHNICAL DATA PRESSURE RATIO 1:1				
Air pressure operating range	3 - 10 bar (40 to 140 psi)			
Air consumption (1)	335 NL/min (11.8 cfm)			
Maximum fluid outlet pressure	10 bar (140 psi)			
Air motor diameter	51 mm (2")			
Air motor effective diameter	35 mm (1.4")			
Air motor stroke	75 mm (3")			
Number of cycles per minute (2)	160			
Maximum free flow delivery (3)	55 l/min (14.53 US gpm)			
Air inlet	1/4" BSP (F)			
Fluid inlet (short pump only)	1" BSP (F)			
Fluid outlet	3/4" BSP (F)			
Wetted and seal materials	Aluminum / Steel / Zinc / NBR / Acetal / Polyurethane			
Noise level (4)	80 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 20 l/min (5.3 US gpm).
- (3) Maximum free delivery at 7 bar.
- (4) Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.



351 120

500

285

52

215

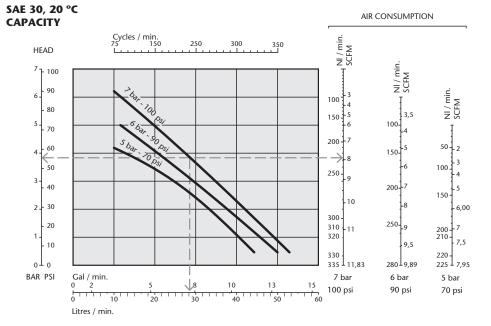
352 120

1,200

285

52

915



SAMOA

OIL PUMPS, PRESSURE RATIO 3:1

353 120

Double acting air operated medium pressure pumps for dispensing lubricants from mobile units, oil distribution packages and small systems. Pumps are capable of pumping all types of lubricants, even those of high viscosity. Pumps include height adjustable bung adaptor 2" BSP (M) for tank or drum mounting, and a built in port for connecting a pressure relief valve (PN 609 007).

Typically used in workshops, service stations, fast lube centres, etc.

PRODUCTS HANDLED

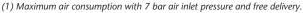
- Synthetic and mineral based lubricants.
- Hydraulic oil.
- Gear oil.
- Transmission Fluid.

MARKETS

- Vehicle maintenance centres.
- Fleet service facilities.
- Manufacturing plants.
- Agriculture.
- Marine.

MODELS				
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.
Wall mounted, stub pump	200 mm	495 mm	3.0 Kg	353 120
60 l (16 gal) drum	700 mm	995 mm	3.9 Kg	358 120
200 l (55 gal) drum	905 mm	1,200 mm	4.2 Kg	354 120

TECHNICAL DATA PRESSURE RATIO 3:1				
Air pressure operating range	3 - 10 bar (40 to 140 psi)			
Air consumption (1)	500 NL/min (17.6 cfm)			
Maximum fluid outlet pressure	30 bar (420 psi)			
Air motor diameter	51 mm (2")			
Air motor effective diameter	35 mm (1.4")			
Air motor stroke	75 mm (3")			
Number of cycles per minute (2)	175			
Maximum free flow delivery (3)	35 l/min (9.3 US gpm)			
Air inlet	1/4" BSP (F)			
Fluid inlet (short pump only)	3/4" BSP (F)			
Fluid outlet	1/2" BSP (F)			
Wetted and seal materials	Aluminum / Steel / Zinc / NBR / PTFE			
Noise level (4)	80 dB			

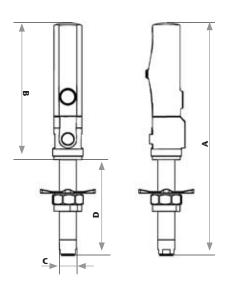


- (2) Number of cycles per minute for a flow rate of 10 l/min (2.7 US gpm).
- (3) Maximum free delivery at 7 bar.
- (4) Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

SAE 30, 20 °C		All	r consumptic	DN
CAPACITY HEAD	Cycles / min. 100 200 300 400 450 500 550	NI / min. SCFM	ċ	,
16 - 230 - 220 - 220 - 220 - 190 12 - 180 12 - 170 140 - 330 8 - 120 - 110 - 140 - 30 - 80 - 70 - 40 - 60 - 50 - 40 2 - 30 - 20 - 10 0 - 0 0 BAR PSI Gal / r		100 - 56 200 - 7 8 250 - 9 10 300 - 11 350 - 12 380 - 14 - 15 450 - 16	SO 2 100 4 150 5 6 200 7 8 250 9 300 10 300 11 12 350 15 6 200 17 18 250 19 300 11 12 350 15 6 6 7 8 7 8 8 10 10 10 10 10 10 10 10 10 10	SO 12 100 14 150 5 6 200 7 8 250 9 10 300 11 350 12 5 bar
0 Litres /	5 10 15 20 25 30 35 4	100 psi 0	90 psi	70 psi



DIMENSIONS					
MODEL	353 120	358 120	354 120		
A (mm)	495	995	1,200		
B (mm)	295	295	295		
C (mm)	34	34	34		
D (mm)	200	700	905		





PUMPMASTER 4 OIL PUMPS

340 120

OIL PUMPS, PRESSURE RATIO 3:1

Double acting air operated medium pressure and high volume pumps for dispensing lubricants in medium size installations including multiple dispensing points with simultaneous operation. Pumps are capable of pumping all types of lubricants, even those of high viscosity. Pumps include height adjustable bung adaptor 2" BSP (M) for drum and tank mounting and a built in port for connecting a pressure relief valve (PN 609 007).

Typically used in workshops, service stations, fast lube centres, fleet maintenance in mining, agriculture, armed forces, construction, trains, etc, in medium length installations with simultaneous operation outlets.

PRODUCTS HANDLED

- Synthetic and mineral based lubricants.
- Gear oil.
- Hydraulic oil.
- Transmission Fluid.

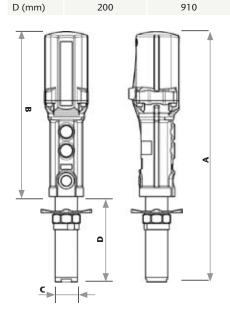
MARKETS

- Vehicle maintenance centres.
- Fleet service facilities.
- Manufacturing plants.
- Agriculture.
- Mining and construction.
- Lube trucks.
- Marine.

MODELS					
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.	
Wall mounted, stub pump	200 mm	585 mm	6.3 Kg	340 120	
200 l (55 gal) drum	910 mm	1,295 mm	8.3 Kg	341 120	

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TECHNICAL DATA PRESSURE RATIO 3:1					
Air pressure operating range		3 - 10 bar (40 to 140 psi)			
Air consumption (1)		675 NL/min (23.8 cfm)			
Maximum fluid outlet pressure		30 bar (420 psi)			
Air motor diameter		88 mm (3.5")			
Air motor effective diameter		60 mm (2.4")			
Air motor stroke		100 mm (4")			
Number of cycles per minute (2)		140			
Maximum free flow delivery (3)		42 l/min (11.1 US gpm)			
Air inlet		3/8" BSP (F)			
Fluid inlet (short pump only)		1" BSP (F)			
Fluid outlet		3/4" BSP (F)			
Wetted and seal materials		Aluminum / Steel / Zinc/ Polyurethane / NBR / PTFE/			
Noise level (4)		93 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 10 l/min (2.7 US gpm).
- (3) Maximum free delivery at 7 bar.
- (4) Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.



340 120

585

385

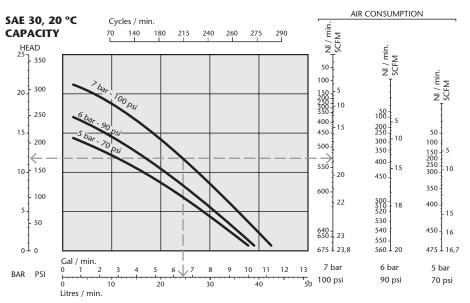
52

341 120

1,295

385

52



DIMENSIONS MODEL

A (mm)

B (mm)

C (mm)

SAMOA

OIL PUMPS, PRESSURE RATIO 5:1

347 120

Double acting air operated high pressure pumps for dispensing lubricants in large size installations including multiple dispensing points with simultaneous operation. Pumps are capable of pumping all types of lubricants, even those of high viscosity. Pumps include height adjustable bung adaptor 2" BSP (M) for drum and tank mounting and a built in port for connecting a pressure relief valve (PN 609 007).

Typically used in workshops, service stations, fast lube centres, fleet maintenance in mining, agriculture, armed forces, construction, trains, etc, in medium large installations even with simultaneous operation outlets.

PRODUCTS HANDLED

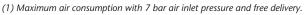
- Synthetic and mineral based lubricants.
- Gear oil.
- Hydraulic oil.
- Transmission Fluid.

MARKETS

- Vehicle maintenance centres.
- Fleet service facilities.
- Manufacturing plants.
- Mining and construction.
- Lube trucks.
- Marine.

MODELS				
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.
Wall mounted, stub pump	278 mm	663 mm	5.0 Kg	347 120
200 l (55 gal) drum	915 mm	1,300 mm	7.0 Kg	348 120

TECHNICAL DATA PRESSURE RATIO 5:1	
Air pressure operating range	3 - 10 bar (40 to 140 psi)
Air consumption (1)	675 NL/min (23.8 cfm)
Maximum fluid outlet pressure	50 bar (420 psi)
Air motor diameter	88 mm (3.5")
Air motor effective diameter	60 mm (2.4")
Air motor stroke	100 mm (4")
Number of cycles per minute (2)	145
Maximum free flow delivery (3)	30 I/min (8 US gpm)
Air inlet	3/8" BSP
Fluid inlet (short pump only)	1" BSP
Fluid outlet	3/4" BSP
Wetted and seal materials	Aluminum /Steel / Zinc/Polyurethane / NBR / PTFE
Noise level (4)	95 dB

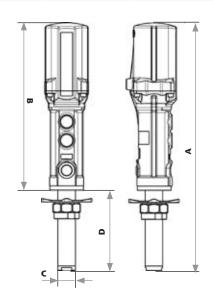


- (2) Number of cycles per minute for a flow rate of 10 l/min (2.7 US gpm).
- (3) Maximum free delivery at 7 bar.
- (4) Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

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DIMENSIONS		
MODEL	347 120	348 120
A (mm)	663	1,300
B (mm)	385	385
C (mm)	42	42
D (mm)	278	915

SAE 30, 20 °	C Cycles / min.	_	CONSUMPTIC	N
CAPACITY	40 70 105 140 175 205 240 275 300 325	E ∑ ë		
HEAD 30 - 435 400 25 - 350 20 - 300 250 15 - 200 10 - 150	5 bar 20 bay 5 bay 50 b	100 ± 150 ± 100 ± 150 ±	SOUTH 10 350 110 350 110 350 110 350 110 350 110 350 110 350 110 350 110 350 110 350 110 115 115 115 115 115 115 115 115 1	05 1 100 1 1
100 5 - 50 0 - 0 BAR PSI		22 650 - 23 675 1 23'8 7 bar ₁ 8 100 psi	17 500 18 19 550 20 6 bar 90 psi	400 - 15 450 - 16 475 - 16'7 5 bar 70 psi





PUMPMASTER 4 OIL PUMPS

349 120

OIL PUMP, PRESSURE RATIO 8:1

Double acting air operated high-pressure pump for dispensing lubricants in applications requiring high pressure and low flow rates, such as medium to large size installations including multiple dispensing points with no simultaneous use. Pump is capable of pumping all types of lubricants, even those of high viscosity. Pumps include height adjustable bung adaptor 2" BSP (M) for drum or tank mounting and a built in port for connecting a pressure relief valve (PN 609 007).

Typically used in workshops, service stations, fast lube centres, fleet maintenance in mining, agriculture, armed forces, construction, trains, etc.

PRODUCTS HANDLED

- Synthetic and mineral based lubricants.
- Hydraulic oil.
- Gear oil.

MODELS APPLICATION

- Transmission fluid.
- Corrosion protection fluids.

MARKETS

- Vehicle maintenance centres.
- Fleet service facilities.
- Manufacturing plants.
- Marine.
- Mining and construction.

TOTAL HEIGHT WEIGHT

PART No.

• Lube trucks.

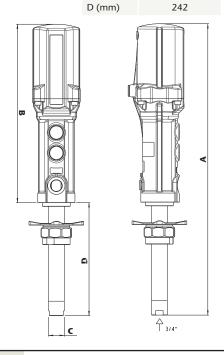
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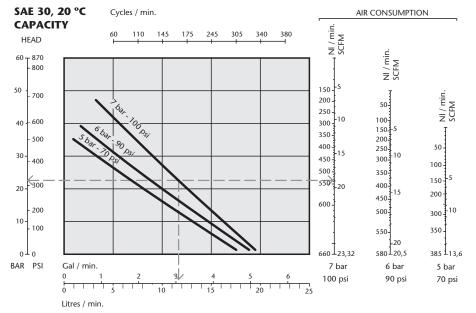
Wall mounted, stub pump	242 mm	627 mm	5.2 Kg	349 120
TECHNICAL DATA PRESSURE	RATIO 8:1			
Air pressure operating range	3 - 10) bar (40 to 140 psi)		
Air consumption (1)	675 N	NL/min (23.8 cfm)		

PUMP TUBE HEIGHT

3 - 10 bar (40 to 140 psi)
675 NL/min (23.8 cfm)
80 bar (1,120 psi)
88 mm (3.5")
60 mm (2.4")
100 mm (4")
175
22 l/min (5.8 US gpm)
3/8" BSP (F)
3/4" BSP (F)
3/4" BSP (F)
Aluminum / Steel / Zinc / NBR/PTFE
95 dB

- **DIMENSIONS** A (mm) 627 385 B (mm) C (mm) 34
- (1) Maximum air consumption with 7 bar air inlet pressure and free delivery.
- (2) Number of cycles per minute for a flow rate of 10 l/min (2.7 US gpm).
- (3) Maximum free delivery at 7 bar.
- (4) Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.





SAMOA

OIL PUMP, PRESSURE RATIO 10:1

343 000

Double acting air operated high-pressure pump for dispensing lubricants in medium to large size installations including multiple dispensing points with simultaneous use. Pump is capable of pumping all types of lubricants, even those of high viscosity. Pump can be flange mounted to a wall bracket or tank. It can also be mounted to 2" bung opening on a drum or tank using an optional bung adaptor (PN 360 006).

Typically used in workshops, fleet maintenance in mining, armed forces, construction, trains, etc.

PRODUCTS HANDLED

- Synthetic and mineral based lubricants.
- Gear oil.

MODELS

- Hydraulic oil.
- Transmission Fluid.

MARKETS

- Vehicle maintenance centres.
- Fleet service facilities.
- Manufacturing plants.
- Mining and construction.
- Lube trucks.

APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.
Wall mounted, stub pump	215 mm	698 mm	13.2 Kg	343 000
TECHNICAL DATA PRESSUR	E RATIO 10:1			
Air pressure operating range	3 -	10 bar (40 to 140 psi))	
Air consumption (1)	1,	050 NL/min (37.1 cfm))	
Maximum fluid outlet pressure	10	0 bar (1,400 psi)		
Air motor diameter	16	0 mm (6.3")		
Air motor effective diameter	11	0 mm (4.3")		
Air motor stroke	10	0 mm (4")		
Number of cycles per minute ((2) 85			
Maximum free flow delivery (3) 30	I/min. (8 US gpm)		
Air inlet	1/	2" BSP (F)		
Fluid inlet	1	1/2" BSP (F)		

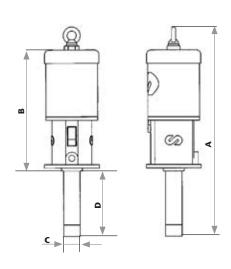
Air motor diameter	160 mm (6.3")	
Air motor effective diameter	110 mm (4.3")	
Air motor stroke	100 mm (4")	
Number of cycles per minute (2)	85	
Maximum free flow delivery (3)	30 l/min. (8 US gpm)	
Air inlet	1/2" BSP (F)	
Fluid inlet	1 1/2" BSP (F)	
Fluid outlet	3/4" BSP (F)	
Wetted and seals materials	Aluminum / 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 10 I/min (2.7 US gpm).
- (3) Maximum free delivery at 7 bar.
- (4) Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

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	.00	-

DIMENSIONS		
A (mm)	698	
B (mm)	483	
C (mm)	54	
D (mm)	215	

SAE 30, 20 °C	Cycles / min.		AIR CONSUMPTI	ON
CAPACITY HEAD	30 85 105 135 170 200	SCFM Pain.	÷	
60 74		650 = 23 700 = 24 700 = 25	NI / min. SCFM	. <u>ci</u>
50 - 3,5		- 27 - 28 - 29	600 - 21 - 22 650 - 23 - 24	NI / min. SCFM
2,5		850 - 30 - 31 900 - 32	700 - 25 - 26	500 - 18 - 19 - 20 600 - 21
20 1,5		50 - 33	800-28 29	650 - 23
-1	,	1000 - 35	850 - 30 880 - 31	700 - 24
0 0,5		- 36 - 37	910 32	- 26 750 26,5
BAR PSI Gal / min. 0 1 0 1 Litres / mir	10 15 15 20 25 7 30	7 bar 2 100 psi 35	6 bar 90 psi	5 bar 70 psi





OIL PUMP KITS

379 003 379 000



TANK MOUNTED PUMPMASTER 2 3:1 PRESSURE RATIO PUMP KIT

379 003 Tank mounted pump kit 3:1 ratio

To install directly onto metal tanks with a 2" BSP (F) top bung opening. Maximum tank interior height: 1,220 mm.

Includes:

- 353 120: 3:1 stub pump.
- 362 910: PumpMaster 2 connection kit for 3:1 pumps.
- 368 900: suction tube.



WALL MOUNTED PUMPMASTER 2 3:1 PRESSURE RATIO PUMP KIT

379 000 Wall mounted pump kit for 200 litre drums 3:1 ratio

The wall mounted pump and the suction assembly allows a fast and clean drum replacement.

Includes:

- 353 120: 3:1 stub pump.
- 362 910: PumpMaster 2 connection kit for 3:1 pumps.
- 367 102: 205 litres drum suction kit for wall mounted pumps.



379 300

DRUM MOUNTED PUMPMASTER 2 3:1 PRESSURE RATIO PUMP KIT

379 300, 200 litre drums mounted pump kit 3:1 ratio

To install directly onto 200 litre drums oil.

Includes:

- 354 120: 3:1 pump for 200 litre drums.
- 362 910: PumpMaster 2 connection kit for 3:1 pumps.

Pump kits include all hoses and adaptors required for connecting an oil pump to the air supply and the oil distribution line.

609 007: recommended options for PumpMaster 2 / 3:1 pump kits.

Pressure relief valve, 1/4" BSP (M) - 60 bar opening. When mounted to the pump body, prevents damage in the system caused by over pressure produced by oil thermal expansion (1 °C increase in temperature can cause up to 10 bar increase in system pressure).



379 404

379 400

379 403





379 404, 200 litre drums mounted pump kit - **3:1 ratio**

To install directly onto 200 litre drums oil.

Includes:

- 341 120: 3:1 pump for 200 litre drums.
- 362 911: PumpMaster 4 connection kit for 3:1 and 5:1 pumps.



WALL MOUNTED PUMPMASTER 4
3:1 PRESSURE RATIO PUMP KIT

379 400 Wall mounted pump kit for 200 litre drums, 3:1 ratio

The wall mounted pump and the suction assembly allows a fast and clean drum replacement.

Includes:

- 340 120: 3:1 stub pump.
- 362 911: PumpMaster 4 connection kit for 3:1 and 5:1 pumps.
- 367 102: Wall installation kit for 205 I drums.
- 945 670: 1"BSP (M) x 3/4"BSP (M) connection adaptor.



TANK MOUNTED PUMPMASTER 4 3:1 PRESSURE RATIO PUMP KIT

379 403 Tank mounted pump kit 3:1 ratio To install directly onto metal tanks with a 2" BSP (F) top bung opening.

Maximum interior height: 1,200 mm.

Includes:

- 340 120: 3:1 stub pump.
- 362 911: PumpMaster 4 connection kit for 3:1 and 5:1 pumps.
- 368 901: 1,400 mm suction tube.

Pump kits include all hoses and adaptors required for connecting an oil pump to the air supply and the oil distribution line.

609 007: recommended options for PumpMaster 4 / 3:1 pump kits.

Pressure relief valve 1/4" BSP (M) - 60 bar opening. When mounted to the pump body, prevents damage in the system caused by over pressure produced by oil thermal expansion (1 °C increase in temperature can cause up to 10 bar increase in system pressure).



OIL PUMP KITS

379 503 379 500 379 504



TANK MOUNTED PUMPMASTER 4 5:1 PRESSURE RATIO PUMP KIT

379 503 Tank mounted pump kit 5:1 ratio

To install directly onto metal tanks with a 2" BSP (F) top bung opening.

Maximum interior height: 1,200 mm.

Includes:

- 347 120: 5:1 stub pump.
- 362 911: PumpMaster 4 connection kit for 3:1 and 5:1 pumps.
- 368 901: 1,400 mm suction tube.



WALL MOUNTED PUMPMASTER 4 5:1 PRESSURE RATIO PUMP KIT

379 500 Wall mounted pump kit for 200 litre drums 5:1 ratio

The wall mounted pump and the suction assembly allows a fast and clean drum replacement.

Includes:

- 347 120: 5:1 stub pump.
- 362 911: PumpMaster 4 connection kit for 3:1 and 5:1 pumps.
- 367 102: Wall installation kit for 205 I drums.
- 945 670: 1" BSP (M) x 3/4" BSP (M) connection adaptor.



DRUM MOUNTED PUMPMASTER 4 5:1 PRESSURE RATIO PUMP KIT

379 504, 200 litre drums mounted pump kit 5:1 ratio

To install directly onto 200 I oil drums.

Includes:

- 348 120: 5:1 pump for 200 l drums.
- 362 911: PumpMaster 4 connection kit for 3:1 and 5:1 pumps.

Pump kits include all hoses and adaptors required for connecting an oil pump to the air supply and the oil distribution line.

609 007: recommended options for PumpMaster 4 / 5:1 pump kits

Pressure relief valve 1/4" BSP (M) - 60 bar opening. When mounted to the pump body, prevents damage in the system caused by over pressure produced by oil thermal expansion (1 °C increase in temperature can cause up to 10 bar increase in system pressure).



379 900

379 910

379 920







DRUM MOUNTED PUMPMASTER 6 10:1 PRESSURE RATIO PUMP KIT

379 900, 200 litre drums mounted pump kit 10:1 ratio

To install directly onto 200 litre oil drums.

Includes:

- 343 000: 10:1 stub pump.
- 368 111: Suction tube for 200 I drums.
- 362 914: PumpMaster 6 connection kit for 10:1 pumps.
- 418 026: 200 litres drum cover for PumpMaster 6 pumps.

WALL MOUNTED PUMPMASTER 6 10:1 PRESSURE RATIO PUMP KIT

379 910 Wall mounted pump kit for tanks 10:1 ratio

For use with tanks with a 2" BSP (F) lower, or bottom-feed, connection.

Includes:

- 343 000: 10:1 stub pump.
- 360 109: PumpMaster 6 wall bracket.
- 945 565: 2" BSP (M) 1" BSP (F) connection adaptor.
- 945 555: 1" BSP (MM) connection adaptor.
- 950 306: 1" BSP (FF) ball valve.
- 362 400: 1 m x Ø 1" suction hose, 1" BSP (MF) with a 90° connector.
- 945 681: 1" BSP (M) 1 1/2" (M) connection adapter.
- 362 914: PumpMaster 6 connection kit for 10:1 pumps.

TANK MOUNTED PUMPMASTER 6 10:1 PRESSURE RATIO PUMP KIT

379 920 Tank mounted pump kit -10:1 ratio

To install directly onto metal tanks with a 2"BSP (F) top bung opening. Maximum interior height: 1,600 mm.

Includes:

- 343 000: 10:1 stub pump.
- 368 112: Suction tube for tanks.
- 362 914: PumpMaster 6 connection kit for 10:1 pumps.
- 360 006: 2" BSP (M) bung adaptor.

Pump kits include all hoses and adaptors required for connecting an oil pump to the air supply and the oil distribution line.

609 007: recommended options for Pump Master 6/10:1 pump kits

Pressure relief valve for mounting at the pump outlet. 60 bar opening. When mounted to the pump outlet, prevents damage in the system caused by overpressure produced by oil thermal expansion (1° increase in temperature can cause up to 10 bar increase in system pressure).



SUCTION ASSEMBLIES



OIL PUMP ACCESSORIES

SUCTION TUBES



Suction assemblies for wall mounted short pumps. Assemblies include Ø 42 suction tube with foot valve, height adjustable 2" bung adaptor and 2 m x 3/4" (19 mm) rubber connection hose. Connection thread 3/4" BSP (M).

367 000 Suction assembly

For 200 litre drums and 1,000 litre IBCs, 1,060 mm suction tube.

Option for PumpMaster 4 pumps:

• 945 670: 1" BSP (M) x 3/4" BSP (M) connection adaptor.

367 003 Suction assembly

For tanks, 1,600 mm suction tube

Option for PumpMaster 4 pumps:

• 945 670: 1" BSP (M) x 3/4" BSP (M) connection adaptor.

367 016 Suction assembly

For 200 litre drums and 1,000 litre IBCs, 1,060 mm suction tube.

Includes: 1 1/2" BSP (M) connection adaptor for use with PumpMaster 6 pumps.



367 011

3 m spring reinforced transparent suction hose for 200 l drums and 1,000 l IBCs. Includes height adjustable 2" bung adaptor and a 90° connection elbow 3/4" BSP (M) to connect to a short pump.

367 012

3 m spring reinforced transparent suction hose with foot valve.

For 200 litre drums and 1,000 litre IBCs. Includes height adjustable 2" bung adaptor, 90° elbow 3/4" BSP (M) to connect to a short pump and foot valve.

362 400

1 m rubber hose for connecting a pump to a tank.

1" BSP (M) connections on both sides, with a 90° connector on one side.



For PumpMaster 2 pumps (3:1 pressure ratio)

 \emptyset 22 mm suction tubes with 3/4" BSP (M) thread

- 368 102: 660 mm length for 200 l drums.
- 368 900: 1,220 mm length for tanks.

For PumpMaster 2 (1:1 pressure ratio) and PumpMaster 4 pumps

 \emptyset 28 mm suction tubes with 1" BSP (M) thread.

- 368 107: 660 mm length for 200 I drums.
- 368 901: 1,220 mm length for tanks.

For PumpMaster 6 pumps

 \emptyset 42 mm suction tubes with 1 1/2" BSP (M) thread.

- 368 111: 660 mm length for 200 l drums.
- **368 112:** 1,400 mm length for tanks.

PUMP BRACKETS



360 102 Wall bracket

For PumpMaster 2 and PumpMaster 4 pumps with 2" bung adaptor.

360 109 Wall bracket

For PumpMaster 6 flange mounted pumps.

360 120 Floor bracket

For PumpMaster 2 and PumpMaster 4 pumps. Recommended for use with tanks having lower, or bottom-feed, connections.

PRESSURE RELIEF VALVES

For protection against system pressure increase due to oil thermal expansion (1 °C increase in temperature can cause 10 bar increase in system pressure). 60 bar (870 psi) valve opening pressure. Posibility to connect either a \varnothing 1/4" hose with a clamp or a hose with 1/8" BSP (F) fitting as return line to the tank.



609 007 Pressure relief valve

For PumpMaster 2 and PumpMaster 4 pumps.

362 913 Pressure relief valve

For PumpMaster 4 and PumpMaster 6 pumps 3/4" BSP (MF).

PUMP PULSATION DAMPER



360 150 Pump pulsation damper

An air chamber to install vertically at the pump outlet in order to reduce pulsations in short distribution circuits. Connection threads: 1/2" BSP (FF).

OIL PUMP ACCESSORIES

SAMOA

AIR LINE ACCESSORIES

CONNECTION ADAPTORS

OIL LINE FILTERS



For PumpMaster 2 pumps

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

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

For PumpMaster 4 and PumpMaster 6 pumps

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

241 201: Air pressure regulator 0-12 bar. 1/4" BSP (FF).

241 001: Air filter + lubricator + regulator 1/2" BSP (F) - 3/8" BSP (F).

241 401: Air lubricator 3/8" BSP (F). - 1/2 " BSP (F).

Connection adaptors

Required when connecting air accessories to a pump.

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 hoses

For PumpMaster 2 pumps

246 006: Air hose, 0.6 m 1/4" BSP (MM). **246 010**: Air hose, 1.0 m 1/4" BSP (MM). **246 015**: Air hose, 1.5 m 1/4" BSP (MM).

For PumpMaster 4 pumps

247 706: Air hose, 0.6 m 3/8" BSP (M) 1/2" BSP (MM).

247 710: Air hose, 1.0 m 3/8" BSP (M) - 1/2" BSP (MM).

247 715: Air hose, 1.5 m 3/8" BSP (M) - 1/2" BSP (MM).

For PumpMaster 6 pumps

362 100: Air hose, 1.0 m 1/2" BSP (MM). **362 101:** Air hose, 1.5 m 1/2" BSP (MM).

Air valves

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

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

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

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



Required when connecting oil hoses to

945 590, 1/4" BSP (MM).

945 592 ,3/8" BSP (MM). **945 593**, 1/2" BSP (MM.

945 551, 3/4" BSP (MM).

945 555, 1" BSP (MM).

945 567, 2" BSP(M) - 1 1/2" BSP (M).

945 681, 1 1/2" BSP (M) - 1" BSP (M).

945 552, 1" BSP (M) - 3/4" BSP (M).

945 554, 3/4" BSP (M) - 1/2" BSP (M).

945 557, 1/2" BSP (M) - 3/8" BSP (M).

945 565, 2" BSP(M) - 1" BSP (F).

945 513, 1 1/4" BSP (M) - 3/4" BSP (F).

945 591, 3/8" BSP (M) x 1/4"BSP (M).

945 670, 1" BSP (M) - 3/4" BSP (F).

369 900, 3/4" BSP (M) - 1/2" BSP (F).

945 556, 1/2" BSP (M) - 3/8" BSP (F).

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

945 572, 3/4" BSP (M) - 3/4" BSP (F) 90°.

945 548, 1/2" BSP (MM) 90°.



950 371 Oil line Y strainer, 1/2" BSP (FF). **950 370 Oil line Y strainer**, 3/4" BSP (FF).

OIL HOSES AND VALVES

Medium pressure, nitrile rubber hoses reinforced with one steel braid. Swaged fittings, swivelling nut and double male adaptor at both ends.

PART No.	LENGTH	INTERNAL Ø	FITTING THREADS	WORKING PRESSURE
362 100	1.0 m	1/2"	1/2" BSP (MM)	100 bar (1,450 psi)
362 101	1.5 m	1/2"	1/2" BSP (MM)	100 bar (1,450 psi)
362 102	2.0 m	1/2"	1/2" BSP (MM)	100 bar (1450 psi)
362 103	3.0 m	1/2"	1/2" BSP (MM)	100 bar (1,450 psi)
362 104	4.0 m	1/2"	1/2" BSP (MM)	100 bar (1,450 psi)
362 106	6.0 m	1/2"	1/2" BSP (MM)	100 bar (1,450 psi)
362 110	10.0 m	1/2"	1/2" BSP (MM)	100 bar (1,450 psi)
362 115	15.0 m	1/2"	1/2" BSP (MM)	100 bar (1,450 psi)
362 300	1.0 m	3/4"	3/4" BSP (MM)	100 bar (1,450 psi)
362 301	1.5 m	3/4"	3/4" BSP (MM)	100 bar (1,450 psi)
362 303	3.0 m	3/4"	3/4" BSP (MM)	100 bar (1,450 psi)
362 305	5.0 m	3/4"	3/4" BSP (MM)	100 bar (1,450 psi)

362 305	5.0 m	3/4"	3/4" BSP (MM)	100 bar (1,450 psi)				
VALVES								
PART No.	CONNEC	TION THREADS	WORKIN	G PRESSURE				
950 320	3/8	B" BSP (FF)	65 bai	(930 psi)				
950 300	1/2	" BSP (FF)	65 bar (930 psi)					
950 303	3/4	BSP (FF)	40 bar (570 psi)					
950 306	1"	BSP (FF)	40 baı	(570 psi)				
950 317	1 1/	4" BSP (FF)	25 bar (360 psi)					
950 312	1 1/	2" BSP (FF)	25 bai	(360 psi)				

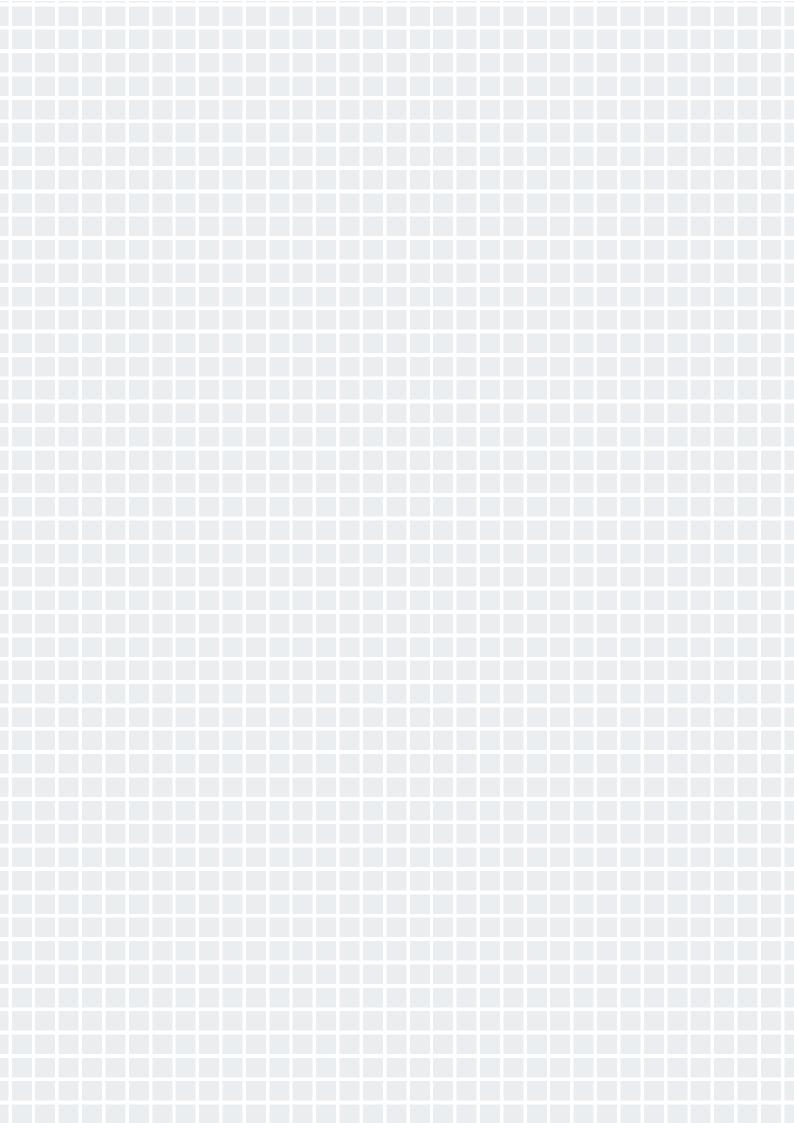
25 bar (360 psi)

2" BSP (FF)

950 308







02

AIR OPERATED GREASE PUMPS AND KITS

AIR OPERATED PISTON PUMPS FOR GREA	SE.									.26
PUMPMASTER 3 GREASE PUMPS										.27
PUMPMASTER 3+3 GREASE PUMPS										.28
PUMPMASTER 6 GREASE PUMPS										.29
GREASE PUMP AND CONNECTION KITS .										.30
CDEACE DUNAD ACCECCODIEC										21







AIR OPERATED PISTON PUMPS FOR GREASE

ffective 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 primin.g piston provides positive pump feeding, even when used with high viscosity or tacky greases and a hardened foot valve min.imizes 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 consumin.g compressed air.



PUMP MASTER 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.



PUMP MASTER 3+3

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. Pump Master 3+3 pumps can also be used in mobile and portable applications when high pressure and high flow are required.



PUMP MASTER 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, 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, min.ing

MODEL2				
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

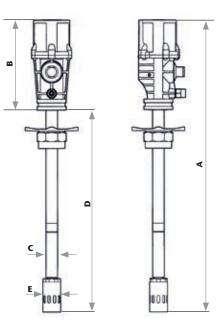
TECHNICAL DATA PRESSURE RATIO 55:1	
Air pressure operating range	3 to 10 bar (40 to 140 psi)
Air consumption (1)	230 NL/min. (8.1 cfm)
Maximum fluid outlet pressure	550 bar (7,700 psi)
Air motor diameter	70 mm (2.75")
Air motor stroke	35 mm (1.4")
Number of cycles per min.ute (2)	150
Maximum free flow delivery (3)	540 gr/min. (1.2 lb/min.)
Air inlet	1/4" BSP (F)
Fluid outlet	1/4" BSP (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 min.ute 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.

NLGI-2, 20 °C	Cycles/min.		AIR CONSUMPTION	ON
CAPACITY	40 75 110 145 180 2	:15 ⊣ .⊑		·
	40 75 110 145 180 2	150 - 5.5 150 - 5.5 - 170 - 6 - 180 - 6.5 - 190 - 7	50 - 2 - 3 100 - 4 150 - 5 160 - 170 - 6.0	EE WHO SO TO THE WORLD TO THE W
- 500		8	7	160
0 1 0 L L L L L L L L L L L L L L L L L		230 ± 8.12		165 1 5.83
BAR PSI 0 0.2	0.4 0.6 0.8 1.0 1.2 1.4	7 bar	6 bar	5 bar
0 100	200 300 400 500 600 700	100 psi	90 psi	70 psi
Grams / min.				



DIMENSIONS								
MODEL	404 100	405 100	407 200	409 200				
A (mm)	610	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				





PUMPMASTER 3+3 GREASE PUMPS

402 050

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. Pumps are available in sizes to fit the following commercial grease drum sizes: 12,5 - 20 kg (40 lb), 50 kg (120 lb) and 185 kg (440 lb). They 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

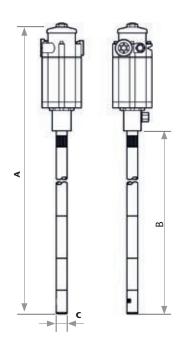
TECHNICAL DATA PRESSURE RATIO 55:1				
Air pressure operating range	3 to 10 bar (40 to 140 psi)			
Air consumption (1)	650 NL/min. (22.9 cfm)			
Maximum fluid outlet pressure	600 bar (8,400 psi)			
Air motor diameter	75 mm (3")			
Air motor stroke	75 mm (3")			
Number of cycles per min.ute (2)	98			
Maximum free flow delivery (3)	1,200 gr/min. (2.6 lb/min.)			
Air inlet	3/8" BSP (F)			
Fluid outlet	3/8" BSP (F)			
Wetted and seal materials	Steel / Zinc / NBR / PTFE / Polyurethane			
Noise level (4)	92 dB			

- (1) Maximum air consumption with 7 bar air inlet pressure and free delivery.
- (2) Number of cycles per min.ute for a flow rate of 500 gr/min. (1.1 lb/min.)
- (3) Maximum free delivery at 7 bar. NLGI-2 grease.

.GI-2, 20 °C APACITY HEAD	Cycles / 60 75		00 105 1	10 115 120	125 130	NI / min. SCFM		UMPTION
7 5,000 4,500 4,000	64 CA	2				Z S 5	NI / min. SCFM	NI / min. SCFM
3,500	24 18 18 18 18 18 18 18 18 18 18 18 18 18	Q				450 15	250	
3,000	Cos	λ				500	400	150 5
2,500		\mathcal{M}			-+-	600 21 610	450 16	350
- 1,500						620 22	500 510 18 520	400
- 1,000						630	530 540	420 430
ol o lb/m	in	11				650 23	550 560 1 _{19.78}	440 450 15.90
R PSI 0	0.5	1.0	1.5	2.0	2.5	7 bar	6 bar	5 bar



DIMENSIONS				
MODEL	402 000	402 025	402 050	
A (mm)	1,010	1,215	804	
B (mm)	730	925	516	
C (mm)	30	30	30	





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 for 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 elimin.ating dirt and impurities that could damage the pump.

Pumps are available to fit 50 kg (120 lb) and 180 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, min.ing, 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

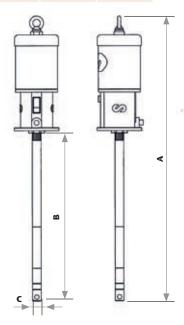
TECHNICAL DATA PRESSURE RATIO 55:1			
Air pressure operating range	3 - 10 bar (40 to 140 psi)		
Air consumption (1)	1,240 NL/min. (43.8 cfm)		
Maximum fluid outlet pressure	550 bar (7,700 psi)		
Air motor diameter	160 mm (6.3")		
Air motor stroke	110 mm (4.3")		
Number of cycles per min.ute (2)	104		
Maximum free flow delivery (3)	3,000 gr/min. (6.6 lb/min.)		
Air inlet	1.2" BSP		
Fluid outlet	3/8" BSP		
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 min.ute 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.

NLGI-2, 20 °C CAPACITY		AIR CONSUMPTION
	Cycles / min. 50 75 100 105 110 115	SCFM s CFM
HEAD 350 35,000		150 T E E
300 -4,500 4,000 250 -3,500		300 10
3,500 200 -3,000 -2,500		900 500 20 600 20 700 25 300 10
150 2,000		1,050
-1,000		1,100 40 700 25 1,200 1,000 35 800
0 0 lb / min.		1,240 43.81 1,060 37.45 850 30.03 7 bar 6 bar 5 bar
BAR PSI 0 0 Grams / n	1 2 3 4 5 6 500 1,000 1,500 2,000 2,500 3,000 nin.	100 psi 90 psi 70 psi 0



DIMENSIONS				
MODEL	401 000	401 025		
A (mm)	1,135	1,330		
B (mm)	640	835		
C (mm)	35	35		





GREASE PUMP AND CONNECTION KITS

429 800

429 900





PUMPMASTER 3+3 GREASE PUMP KITS

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 180 kg drums

Includes:

- 402 025: PumpMaster 3+3 high pressure grease pump with bung adaptor.
- 418 006: Drum cover for 180 kg drums.
- 417 004: Follower plate for 180 kg drums.
- 412 920: PumpMaster 3+3 connection kit.

PUMPMASTER 6 GREASE PUMP KIT

429 900 PumpMaster 6 grease pump kit for 180 kg drums

Includes:

- 401 025: PumpMaster 6 high pressure grease pump.
- 418 026: Drum cover for 180 kg drums.
- 417 004: Follower plate for 180 kg drums.
- 412 930: PumpMaster 6 connection kit.



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	180 kg drums	610 - 565 mm	2" BSP (F)
418 026	180 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

Elimin.ates air pockets and aids pump prime. Rubber flange min.imizes waste. With handle for easy removal from empty drums.

PART No.	DRUM TYPE	DRUM EXT. Ø (MAX MIN.)	PUMP TUBE Ø (MAX MIN.)
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	180 kg drums	590 - 550 mm	42 - 26 mm
417 006	12.5 kg pails	260 - 190 mm	42 - 26 mm



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	PumpMaster 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.
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)



AIR LINE ACCESSORIES

GREASE PUMP ACCESSORIES

GREASE HOSES AND VALVES



For PumpMaster 3 and PumpMaster 3+3 pumps

240 200 Air pressure regulator ,10 -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) - 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.







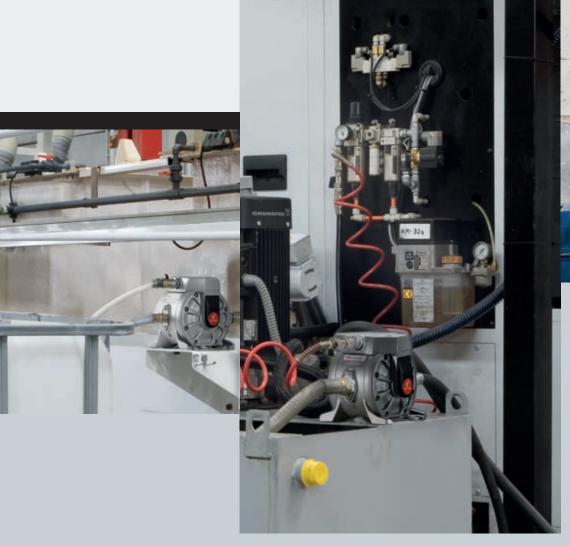
High pressure, nitrile rubber hoses reinforced with high a density of steel braids. Swaged fittings with swivelling nut and adaptors on both ends.

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 (F	F)	500 bar (7,140 psi)	

03

AIR OPERATED PUMPS FOR OTHER SERVICE FLUIDS

AIR UPERATED DUUBLE DIAPHRAGM PUMPS	34
DF 50 METALLIC PUMPS	37
DF 50 MIXING PUMPS	38
DF 50 NON METALLIC PUMPS	39
DF 100 METALLIC PUMPS	10
PUMPMASTER 1 PUMP	11
PUMPMASTER 2 SUCTION PUMP	11
PUMPMASTER 2 PUMPS	12
PLIMPMASTER / PLIMPS	10

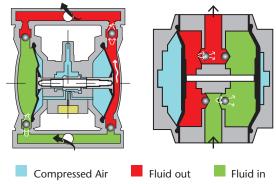






dedirectflo

ir operated double diaphragm pumps are air-powered, reciprocating positive displacement pumps with two pumping chambers. Two diaphragms, centrally located in the chambers, separate the compressed air (dry side) from the fluid being pumped (wet side). A shaft transmits the reciprocating motion of one diaphragm to the other. A valve (air motor) alternatively distributes the air from one chamber to the other; thus a reciprocating movement of the diaphragms is created. With each stroke fluid is discharged by one of the diaphragms whilst the opposite diaphragms sucks new fluid into the expanding chamber. Check valves, two on the discharge side and two on the suction side, control and direct the fluid flow.



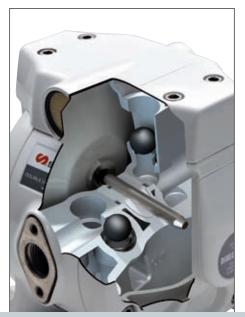
MAIN DirectFlo® PUMP FEATURES

In most conventional design diaphragm pumps, the wet side of each diaphragm is on the outside and the dry side is on the inside. This means that manifolds, which create added friction and pressure loss, are required for collecting the fluid into the pump and for its delivery. Traditional diaphragm pump designs result in negative consequences such as high air consumption, highly pulsating flow, complicated maintenance, etc. DirectFlo® pumps work differently. The pumped fluid follows a straight and direct flow path, through the interior of the pump body. This way, DirectFlo® pumps avoid using manifolds. As consequence of their innovative design, DirectFlo® pump present the following advantages when compared with traditional external flow pumps:

- Compact design.
- Reduced air consumption.
- Reduced flow pulsation.
- Superior performance against back pressure.
- Improved suction capacity.
- Increased diaphragm and shaft life.
- Reduced number of components.
- Lubricant free air motor.
- Extremely easy maintenance.
- In-line installation.

High value innovations for the market

DirectFlo® pumps are designed to be used as both transfer and system pumps. As system pumps, they can work on demand, for example starting immediately once a delivery valve is opered and stopping once it is closed. In the stalled condition the pump has no air leaks, a common issue with conventional diaphragm pumps.







In addition to the central ball-valves fluid path technique DirectFlo® pumps feature two significant innovations: the Flexible Diaphragm Suspension (FDS) and the Frictionless Pivoting Air Valve (FPV).

FLEXIBLE DIAPHRAGM SUSPENSION

One of the innovations behind the pump's smooth operation is the patented FDS technology (Flexible Diaphragm Suspension). The diaphragms are not fixed to the shaft and they can move independently of each other and work with soft, overlapping movements. This minimizes pulsations, increases time between services and enables a central flow.

Flexible Diaphragm Suspension reduces fatigue on the diaphragms, contributing to extend their service life. Also, shaft life is significantly increased especially with heavy suction delivery loads, since the diaphragm only pushes the shaft and does not transmit any non-axial loads.

FRICTIONLESS PIVOTING AIR VALVE

The FDS principle is complemented with the use of short stroke diaphragms that reciprocate very quickly thanks to a unique and patented pivoting air mechanism concept. Short strokes dramatically reduces the fatigue on the diaphragms and this contributes to extend their life. A traditional sliding air valve could not be used as the friction in this kind of air valves is too high to allow the extremely fast reversing action required. Therefore a new friction free air valve, the Frictionless Pivoting Air Valve, was developed.

This air valve is the heart of the drive system and ensures very high operational reliability. The air motor, including the power valve module, the end of stroke signal valve sensors and the castings, is self-cleaning and withstands oily, dry, humid or dirty compressed air.

This patented pivot type air valve switches faster than any other diaphragm pump air valve. Switching time is about 3 to 4 milliseconds, whilst a conventional air valve requires at least 20 times longer switching time.

SIMPLE RELIABILITY, REDUCED TO THE MAX

DirectFlo® pumps are extremely simple. The number of internal components is very small, resulting in a very reliable pump with minimum maintenance requirements. Thanks to its central flow design with no manifolds, the pump can be fully serviced without the need to dismount it from the fluid distribution line. Thanks to its simplicity, regular service and maintenance (air motor service, cleaning or replacing valves, replacing worn diaphragms, etc.) can be performed faster and without errors even by untrained personnel.



DIRECTFLO® PUMP INSTALLATION AND INSTALLATION ACCESSORIES

DIRECTFLO® PUMP INSTALLATION

Like any other air operated pump, DierctFlo® diaphragm pumps should be installed appropriately to ensure a long and dependable operation life.



Air supply

Compressed air should be clean and dry. The use of a combined air filter and pressure regulator (1) or an air pressure regulator is recommended. Always install an air shut-off valve (2) for isolating the pump for eventual maintenance purposes. Always use a flexible hose for connecting the pump to the air supply with a quick air coupler at the hose end. At the pump air inlet always fasten an air nipple.

Suction side

DirectFlo® pumps can be installed flooded, submerged and with negative suction head. When the pump is installed submerged, the air outlet must be vented outside the fluid. Use the shortest possible suction line. Never exceed pump maximum suction head. Use the suction hose or tube with the largest possible diameter. When using a suction tube, always use a hose (3) to connect the tube to the pump fluid inlet. Install a shut-off valve (4) for isolating the pump from the suction line for eventual maintenance purposes.

Delivery side

Like air operated piston pumps, DirectFlo® pumps stall against back pressure. The pump operation can be controlled by simply opening and closing the fluid dispensing valve. When the pump is installed in fluid distribution systems, please observe the following recommendations: Always use a flexible hose for connecting the pump outlet to the fluid distribution line (5). Always install a shut off valve close to the pump outlet to isolate it for eventual to instale it maintenance purposes .

Pump control

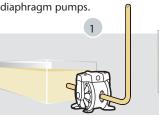
The pump can be controlled using the Advanced Monitoring, Tank Management or Tank Alert Systems. When connected to an air solenoid valve in the air supply, the Tank Management or the Tank Alert System (6) can prevent the pump from running dry as the system can be programmed to close the solenoid valve once the tank level has reached a minimum value. This way pump life can be increased and there is no possibility of air entering into the fluid line. The Advanced Monitoring System (7) can be used as a powerful batch and dosing system. It offers multiple control options and helps to keep deliveries under control. Through the IFDM module, the system can work with a variety of meters and solenoid valves compatible with the fluid used. Please refer to pages 63 to 67 for more information about monitoring and control systems.

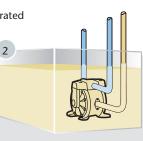
PUMP MOUNTING ACCESSORIES

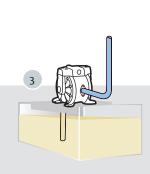
Please refer to pages 23 and 24 for installation accessories. Check material compatibility of suction accessories before using them.

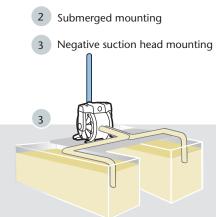
360 100 Pump bracket

Pump bracket for DF50 and DF100 air operated double diaphragm pumps.









Flooded mounting

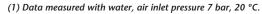


DF50 METALLIC PUMPS 552 010

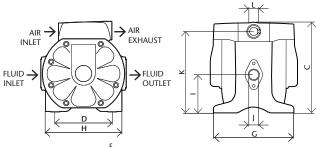
For fluid transfer and distribution systems. 50 l/min., 14 US gpm 1/2" fluid port. Very robust construction, the pump is fully enclosed in an aluminum shield.

MODELS AND APPLICATIONS						
APPLICATION	WETTED MATERIAL	CHECK BALLS	DIAPHRAGMS	PART No.		
Lubricants, waste oil, antifreeze, water.	Aluminium	NBR	Hytrel®	552 010		
Lubricants, waste oil, antifreeze, water, windshield wash, brake fluid.	Nickel coated aluminium	Acetal	Hytrel®	552 011		

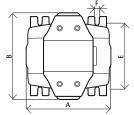
TECHNICAL DATA	
Pressure ratio	1:1
Maximum free delivery (1)	50 l/min. (14 US gpm)
Delivery per stroke aprox. (1)	0.1 litres (0.026 US gallons)
Air pressure operating range	3 to 7 bar (45 to 100 psi)
Solids in suspension max size	3 mm (1/8")
Max dry suction head (1)	6 m (20')
Max wet suction head (1)	8 m (26')
Weight	3.5 Kg (9.4 lb)
Fluid inlet	1/2" BSP (F) and flange
Fluid outlet	1/2" BSP (F) and flange
Air inlet	3/8" BSP (F)
Wetted part materials	See Models and Applications

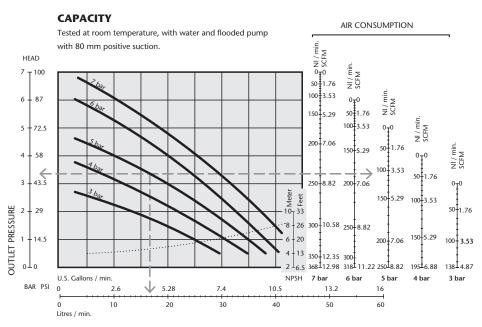






DIMENSIONS (mm)					
Α	В	С	D	E	F
156	160	167	105	122	8
G	Н	1	J	K	L
146	140	70	1/2" (F)	150	3/8" (F)







AIR OPERATED DIAPHRAGM PUMPS

552 021 - 552 026

DF50 MIXING PUMPS

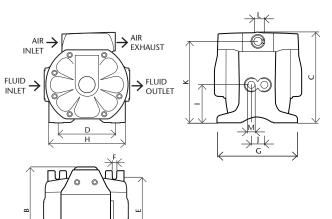
Metallic and non-metallic pumps for 1:1 mixing of fluids (water/antifreeze, water/windshield washer fluid). 50% proportioning of each fluid is fixed and can not be changed. Very robust construction, the pump is fully enclosed in a shield and has corrosion proof wetted

materials. 50 l/min. - 14 US gpm; $2 \times 3/8$ " fluid inlet and 1/2" fluid outlet ports.





TECHNICAL DATA	
Pressure ratio	1:1
Maximum free delivery	50 l/min. (14 US gpm)
Delivery per stroke	0.1 litres (0.026 US gallons)
Air pressure operating range	3 to 7 bar (45 to 100 psi)
Solids in suspension max size	3 mm (1/8")
Max dry suction head	6 m (20')
Max wet suction head	8 m (26')
Weight	3.5 Kg (9.4 lb)
Fluid inlet	2 x 3/8" BSP
Fluid outlet	1/2" BSP and flange
Air inlet	3/8" BSP
Wetted part materials	See Models and Applications



DIMENSIONS (mm)						
Α	В	С	D	Е	F	
156	160	167	105	122	8	
G	Н	1	J	K	L	М
146	140	70	24	150	3/8"	3/8"

Pump capacity curve same as DF50 metallic (PN 552 021) and non metallic (PN 552 026) pumps.



DF50 NON METALLIC PUMPS 552 016

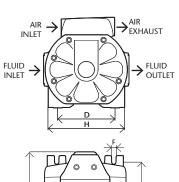
For fluid transfer and distribution systems.

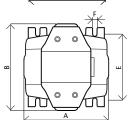
Very robust construction. The pump is fully enclosed in a shield and has non-metallic wetted parts.

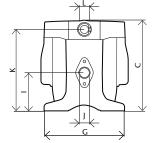
MODELS AND APPLICATIONS				
APPLICATION	WETTED MATERIAL	CHECK BALLS	DIAPHRAGMS	PART No.
Lubricants, waste oil, antifreeze, transmission fluid, windshield wash, solvents	Acetal	Acetal	Hytrel®	552 016
Lubricants, waste oil, antifreeze, transmission fluid, windshield wash, detergents	Polypropylene	Polypropylene	Hytrel®	552 015
AdBlue (DEF)	Acetal	Acetal	Teflon	552 014

TECHNICAL DATA	
Pressure ratio	1:1
Maximum free delivery	50 l/min. (14 US gpm)
Delivery per stroke	0.1 I (0.026 US gallons)
Air pressure operating range	3 to 7 bar (45 to 100 psi)
Solids in suspension max size	3 mm (1/8")
Max dry suction head	6 m (20')
Max wet suction head	8 m (26')
Weight	3.5 Kg (9.4 lb)
Fluid inlet	1/2" BSP (F) and flange
Fluid outlet	1/2" BSP (F) and flange
Air inlet	3/8" BSP (F)
Wetted part materials	See Models and Applications

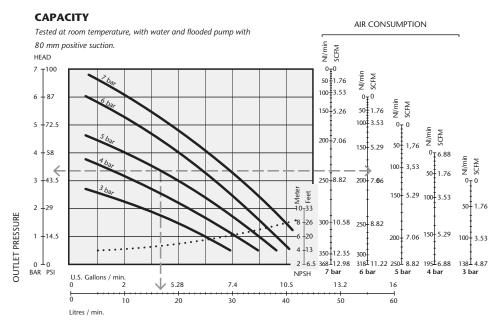








DIMENSIONS (mm)					
Α	В	С	D	E	F
156	160	167	105	122	8
G	Н	1	J	K	L
146	140	70	1/2"	150	3/8"





AIR OPERATED DIAPHRAGM PUMP

551 010

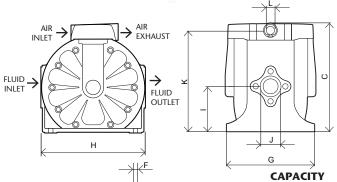
DF100 METALLIC PUMP

For fluid transfer, evacuation and distribution systems. 100 l/min. - 28 US gpm 1" fluid port. Very robust construction, the pump is fully enclosed in an aluminum shield.

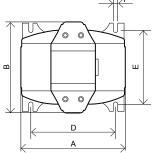
MODELS AND APPLICATIONS				
APPLICATION	WETTED MATERIAL	CHECK BALLS	DIAPHRAGMS	PART No.
Lubricants, waste oil, antifreeze, transmission fluid, water	Aluminium	Hytrel®	Hytrel®	551 010



	TECHNICAL DATA
Pressure Ratio	1:1
Maximum free delivery	100 l/min. (28 US gpm)
Delivery per stroke	0.35 I (0.09 US gallons)
Air pressure operating range	3 to 7 bar (45 to 100 psi)
Solids in suspension max size	4 mm (3/16")
Max dry suction head	4.5 m (15')
Max wet suction head	7 m (23')
Weight	7.2 Kg (19.3 lb)
Fluid inlet	1" BSP and flange
Fluid outlet	1" BSP and flange
Air inlet	3/8" BSP
Wetted part materials	See Models and Applications



DIMENSIONS (mm)					
Α	В	С	D	E	F
216	189	227	175	154	9
G	Н	1	J	K	L
184	210	94.5	1"	210	3/8"



	CAI ACITI	AIR CONSUMPTION
	Tested at room temperature, with water and flooded pump with 80 mm	7 20113011111011
	positive suction.	
	obstive suction.	SCFM SCFM
		SCFM SCFM
HEAD 7 + 100		0=0
7 T100	>.	50 1.76 등 ≥
		50 1.76 E NO. 100 NO.
6 + 87		150 1 5.29 0-0
	6 ban	200 7.06 50 1.76 E X 250 8.82 100 3.53 Z X
		300 10.58 100 3.53 Z 🗴
5 +72.5	5/201	† 150 ‡ 5.29
		350 12.35 200 7.06 50 1.76 E
4 - 58		1 100‡3.33 0_0
4 738	1 bar	150 \$ 5 29 \$ 1 1 1 1 2
_		
3 +43.5		400-14.12 100-3.53 0 _T 0
	3 par 10,33	250 8.82 150 5.29 50 1.76
뀖		1 1 1 5 1.70
S 2 +29	10,733	350-12.35 200-7.06 100-3.53
ES	8+26	300 10.58 1 150 5.29
2 +29 2 +29 1 +14.5	6-20	450 15 00
⊟ ' T'*		250 8.82 200 7.06
5	4 13	
o °1°	216.5	400-14.12 490-17.30 410-14.47 350-12.35 290-10.24232-8.19
BAR PSI	U.S. Gallons / min. NPSH	7 bar 6 bar 5 bar 4 bar 3 bar
	0 2.60 5.28 7.4 10.5 13.2 16 18.6 21 23.	
	0 10 20 30 40 50 60 70 80 90) 100 110 120
) 100 110 120
	Litres / min.	

AIR OPERATED PISTON PUMP FOR OTHER FLUIDS AND SUCTION PUMP



PUMPMASTER 1 FLUID TRANSFER PUMP

330 100

Small but very versatile air operated transfer pump compatible with a wide range of slightly corrosive fluids such as detergents, windshield wash, light inks, water based paint, ink and varnish, etc. Includes air needle valve at the air inlet for adjusting the pump speed. Mounting thread 3/4" BSP (M).

TECHNICAL DATA						
PART No.	330 100					
Pressure ratio	1:1					
Air pressure operating range	2 - 8 bar (30 - 115 psi)					
Air consumption (1)	240 NI/min (8.5 cfm)					
Maximum fluid outlet pressure	8 bar - (115 psi)					
Air motor piston diameter	36 mm (1 1/2")					
Air motor effective diameter	20 mm (0.8 ")					
Air motor piston stroke	80 mm (3")					
Number of cycles per litre	10,5 (40 cycles per gallon)					
Maximum free flow delivery (2)	15 l/min. (4 US gpm)					
Air inlet	1/4" BSP (F)					
Fluid inlet	3/8" BSP (F) and 1/2" hose adaptor					
Fluid outlet	3/8" BSP (M)					
Wetted and seals materials	Aluminium / stainless steel / chromium steel / PTFE / Viton					
Noise level (3)	86 dB					



PUMPMASTER 2 SUCTION PUMP

351 121

1:1 pressure ratio, double acting air operated pump for non-corrosive liquids, waste oil, etc. For wall, floor or drum trolley installation. This special pump is designed to create maximum vacuum and will not race when there is no liquid in the suction side. Recommended when you cannot control the pumping process or when using suction wands.

TECHNICAL DATA						
PART No.	351 121					
Pressure ratio	1:1					
Air pressure operating range	3 - 10 bar (42 - 140 psi)					
Air consumption (1)	335 NI/min (11.8 cfm)					
Maximum fluid outlet pressure	10 bar - (140 psi)					
Air motor piston diameter	51 mm (2")					
Air motor effective diameter	35 mm (1.4")					
Air motor piston stroke	75 mm (3")					
Number of cycles per litre	7.4 (28 US cpg)					
Maximum free flow delivery (4)	20 l/min. (5.3 US gpm)					
Air inlet	1/4" BSP (F)					
Fluid inlet	1" BSP (F)					
Fluid outlet	3/4" BSP (F)					
Wetted and seals materials	Nikel coated aluminum / stainles steel / acetal / NBR / polyurethane					
Noise level (3)	91.5 dB					

- (1) Maximum air consumption with 7 bar air inlet pressure and free delivery.
- (2) Free delivery at 7 bar air inlet pressure, using water. Continuos duty flow rate: 6.5 I/min. (1.7 US gpm).
- (3) Maximum noise level measured 1 m from the pump, 7 bar air pressure and free delivery
- (4) Free delivery at 7 bar air inlet pressure, using SAE 20 oil at 20 °C room temperature.





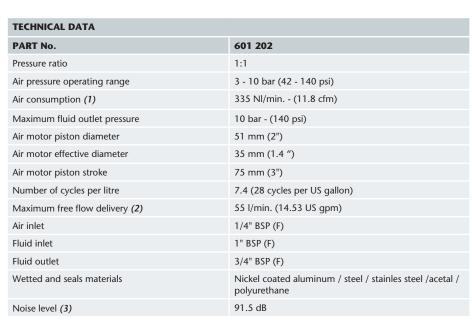
AIR OPERATED PISTON PUMPS FOR OTHER SERVICE FLUIDS

601 202

PUMPMASTER 2/1:1 PRESSURE RATIO NICKEL COATED LIQUID PUMP

PUMPMASTER 2 Liquid pump 1:1 pressure ratio nickel coated pump

1:1 pressure ratio PUMPMASTER 2 pump with corrosion protected wetted parts. It can be used with all types of lubricants and glycol or windshield washer water based solutions.





331 110.002 PVC suction tube for 220 litre drums.

331 120 - 333 120

S SAMOA P

PUMPMASTER 2 AND PUMPMASTER 4 STAINLESS STEEL PISTON PUMPS

PUMPMASTER 2 and PUMPMASTER 4 air motors with AISI 316 stainless steel divorced pumps. Pumps can be used with a wide variety of fluids such as paint solvents, cleaning fluids, anti-freeze and wind shield washer fluids, detergents, anticorrosion fluids, light inks, etc.

TECHNICAL DATA		
PART No.	331 120	333 120
Pressure ratio	1:1	3:1
Air pressure operating range	3 - 10 bar	3 - 10 bar
Air consumption (1)	195 NI/min. (6.86 cfm)	720 NI/min. (25.36 cfm)
Maximum fluid outlet pressure	10 bar (140 psi)	30 bar (420 psi)
Air motor piston diameter	51 mm (2")	88 mm (3.5")
Air motor effective diameter	35 mm (1.4")	60 mm (2.4")
Air motor piston stroke	75 mm (3")	100 mm (4")
Number of cycles per litre	4 (15 cycles per US gallon)	3.5 (13 cycles per US gallon)
Maximum free flow delivery (2)	38 lpm (10 US gpm)	45 lpm (11.9 US gpm)
Air inlet	1/4" BSP (F)	3/8" BSP
Fluid inlet	1" BSP (F)	1" BSP
Fluid outlet	3/4" BSP (F)	3/4" BSP
Wetted and seal materials	PTFE / Viton /s. steel	PTFE / Viton / s. steel
Noise level (3)	86 dB	93 dB

Accessories:

733 218 PVC suction tube for 220 l drums.

- (1) Maximum air consumption with 7 bar air inlet pressure and free delivery.
- (2) Maximum free delivery at 7 bar air inlet pressure, using water.
- (3) Maximum noise level measured 1 m from the pump, 7 bar air pressure and free delivery.

04

HOSE REELS

Hose reels general information	44
501 SERIES DOUBLE PEDESTAL ARM HOSE REELS	45
502 SERIES INDIVIDUALLY ENCLOSED HOSE REELS	46
504 SERIES DOUBLE PEDESTAL HOSE REELS	47
505 SERIES HIGH CAPACITY HOSE REELS	48
506 Series Single Arm Hose Reels	49
HOSE SPECIFICATIONS	50
COMPACT REELS FOR AIR AND CABLE	51
HOSE REEL MOUNTING ACCESSORIES	52
Hose reel Kits	53
SINGLE ARM HOSE REEL KITS	54





amoa hose reels are used around the world and they have been designed to be premium quality fluid reels. Properly positioned, a hose reel will increase productivity. Safety in the shop is enhanced because hoses are retracted when not in use and so hoses trailing across the floor are eliminated. Hose life is greatly extended since hoses are not dragged across the floor, nor walked upon, nor driven since the hose is always ready at hand and can be retracted out of the way when not in use.

Hose reels can be mounted on wall, ceiling, floor or on top of tanks, benches, etc. Samoa offers a wide range of mounting accessories to help with the installation of an individual reel or a reel bank.

COMPRESSED AIR • WATER • DIESEL • LUBRICANTS • ANTIFREEZE • WINDSHIELD WASH • GREASE • AdBlue

ALL SAMOA REELS HAVE

- Superior power spring life. Special fatigue resistant steel spring guarantees long life and trouble free operation.
- Heavy duty ratchet, with large effective radial latching area for an easier and user-friendly operation.
- Metal arms, enclosures, base and spool are epoxy powder coated for increased wear resistance.
- Samoa only uses high quality hoses, specially formulated for use in hose reels, from established European manufacturers.

ADVANTAGES OF THE USE OF HOSE REELS

- Increased productivity.
- Reduced wear and increased life of hoses.
- Simple hose handling and storage.
- Lower risk of accidents as hose reels contribute to keep hoses out off the floor.
- Work environment improvement.

CODE	HOSE TYPE	APPLICATION
А	SBR synthetic rubber with textile braid	Air and water up to 20 bar
В	EPDM with textile braid	Windshield wash fluid, solvents, and fluids up to 20 bar.
С	SBR synthetic rubber with one steel braid	Hot and cold high pressure water up to 150 °C and 170 bar.
D	NBR synthetic rubber with one steel braid	Oil, air, water and antifreeze up to 100 bar W. P.
E	NBR synthetic rubber with one high density steel braid	Grease up to 350 bar (1/4" i.d.) or 280 bar (3/8" i.d.) W. P.
F	Polyurethane and PVC	Air and water up to 15 bar.

NBR: Nitrile butadiene rubber. SBR: Styrene butadiene rubber.

EPDM: Ethylene propylene M-class rubber.

Samoa offers a wide range of brackets, racks and stands for mounting hose reels. A properly installed hose reel has an inlet hose to prevent vibration transfer to the reel. A shut off valve is positioned at the inlet hose to allow the isolation of each reel for servicing purposes.

SAMOA

10 M OPEN TYPE HOSE REELS - 501 SERIES



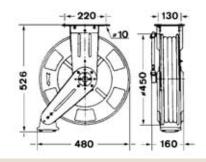


Applications: Delivery of compressed air, low pressure water, lubricants and grease in vehicle maintenance centres, general industry, agriculture, service stations, etc.

Double pedestal hose reel for air, low pressure water, medium pressure lubricants and high pressure grease. All metal arm construction, can handle up to 10 m (30') of 1/2" hose.

Main features:

- Brass forged shaft compatible with a wide range of fluids ensures corrosion free and leak proof operation.
- Robust all steel construction with double pedestal arm design.
- Special fatigue resistant steel spring for years of durable performance.
- Epoxy powder coated for increased wear resistance.
- Positionable outlet arms for an optimum operation in any mounting position: wall, ceiling, floor or tank.
- No special maintenance required.



PART No.	HOSE LENGTH	HOSE DIAMETER NOMINAL - O.D. X I.D.	OUTLET THREAD	INLET THREAD	HOSE TYPE	HOSE PRESSURE RATING	HOSE BURST PRESSURE	NET WEIGHT	WITHOUT HOSE PART No.
	COMPRESSED AIR AND LOW PRESSURE WATER								
501 100	10 m - 30'	3/8" - 17 x 10 mm	R 3/8" (M) ²	R 1/2 (M) ²	A	20 bar - 300 psi	45 bar - 650 psi	17.9 Kg	501 198 ¹
			(DIL, ANTIFREEZE	, AIR AND	WATER			
501 200	10 m - 30'	1/2" - 18 x 12.5 mm	G 1/2" (F/M) ³	G 1/2" (F/M) ³	D	100 bar - 1,500 psi	400 bar - 6,000 psi	20.0 Kg	501 298 ¹
	GREASE								
501 300	10 m - 30'	1/4" - 14 x 6.4 mm	R 1/4" (M) ²	G 1/4" (F/M) ³	E	350 bar - 5,000 psi	1,400 bar - 20,000 psi	19.2 Kg	501 398 ¹

- 1. Models supplied without hose. Maximum working pressure is the minimum working pressure of the individual components used, normally the hose.
- 2. Swaged male tapered threads.
- 3. Swaged 60° cone nut and 60° double male adapter.



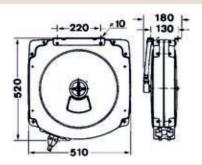
502 SERIES INDIVIDUALLY ENCLOSED HOSE REEL

502 204

Applications: Delivery of compressed air, low and high pressure water, medium pressure lubricants and high pressure grease in vehicle maintenance centres, general industry, agriculture, service stations, etc.

10 AND 13 M INDIVIDUALLY ENCLOSED REELS - 502 SERIES





Individually enclosed hose reel for air, low and high pressure water, medium pressure lubricants and high pressure grease. All metal construction, can handle up to 10 m (30') of 1/2" or 13 m (43') of 3/8" hose.

Main features:

- Corrosion resistant aluminium shields form an attractive and very rigid structure.
- Brass forged shaft compatible with a wide range of fluids ensures corrosion free and leak proof operation.
- Special fatigue resistant steel spring for years of durable performance.
- Epoxy powder coated for increased wear resistance.
- Positionable mounting brackets for an optimum operation in any mounting position: wall, ceiling, floor or tank.
- No special maintenance required.

PART No.	HOSE LENGTH	HOSE DIAMETER NOMINAL - O.D. X I.D.	OUTLET THREAD	INLET THREAD	HOSE TYPE	HOSE PRESSURE RATING	HOSE BURST PRESSURE	NET WEIGHT	REEL WITHOUT HOSE PART No.
			COMP	RESSED AIR AND	LOW PR	ESSURE WATER			
502 104	10 m - 30'	3/8" - 17 x 10 mm	R 3/8" (M) ²	R 1/2 (M) ²	Α	20 bar - 300 psi	45 bar - 650 psi	20.0 Kg	502 198 ¹
502 101	13 m - 43'	3/8" - 17 x 10 mm	R 3/8" (M) ²	R 1/2 (M) ²	Α	20 bar - 300 psi	45 bar - 650 psi	21.0 Kg	502 199 ¹
	HOT AND COLD WATER 150 °C - 300 °F MAXIMUM TEMPERATURE								
502 400	10 m - 30 '	3/8" - 16 x 10 mm	G 3/8" (M) ³	G 1/2 (M) ³	c	170 bar - 2,500 psi	680 bar - 10,000 psi	21.0 Kg	502 499 1
				OIL, ANTIFREEZI	E, AIR AND	WATER			
502 204	10 m - 30'	1/2" - 18 x 12.5 mm	G 1/2" (F/M) ³	G 1/2" (F/M) ³	D	100 bar - 1,500 psi	400 bar - 6,000 psi	20.5 Kg	502 298 ¹
502 201	13 m - 43'	3/8" - 16 x 10 mm	G 1/2" (F/M) ³	G 1/2" (F/M) ³	D	100 bar - 1,500 psi	400 bar - 6,000 psi	21.0 Kg	502 299 1
				GR	EASE				
502 304	10 m - 30'	1/4" - 14 x 6.4 mm	R 1/4" (M) ²	G 1/4" (F/M) ³	E	350 bar - 5,000 psi	1,400 bar - 20,.000 psi	19.5 kg	502 398 ¹
502 301	13 m - 43'	1/4" - 14 x 6.4 mm	R 1/4" (M) ²	G 1/4" (F/M) ³	E	350 bar - 5,000 psi	1,400 bar - 20,000 psi	21.0 Kg	502 399 1

- 1. Models supplied without hose. Maximum working pressure is the minimum working pressure of the individual components used, normally the hose.
- 2. Swaged male tapered threads.
- 3. Swaged 60° cone nut and 60° double thread male adapter.

504 SERIES DOUBLE PEDESTAL ARM HOSE REEL



15 M OPEN TYPE HOSE REELS - 504 SERIES

504 200

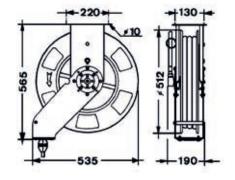


Applications: Delivery of compressed air, low and high pressure water, lubricants and grease in vehicle maintenance centres, field service units and lubrication trucks, mining, construction, general industry, agriculture, service stations, etc.

Heavy Duty reinforced double pedestal hose reel for air, low and high pressure water, medium pressure oil and high pressure grease. All metal construction, can handle up to 15 m (50') of 1/2" hose.

Main features:

- Brass forged shaft compatible with a wide range of fluids ensures corrosion free and leak proof operation.
- \bullet Very robust reinforced all steel Heavy Duty construction with double pedestal arm design.
- Special fatigue resistant steel spring for years of durable performance.
- Epoxy powder coated for increased wear resistance.
- Positionable outlet arms for an optimum operation in any mounting position: wall, ceiling, floor or tank.
- No special maintenance required.



PART No.	HOSE LENGTH	HOSE DIAMETER NOMINAL - O.D. X I.D.	OUTLET THREAD	INLET THREAD	HOSE TYPE	HOSE PRESSURE RATING	HOSE BURST PRESSURE	NET WEIGHT	REEL WITHOUT HOSE PART No.
	COMPRESSED AIR AND LOW PRESSURE WATER								
504 100	15 m - 50'	1/2" - 20 x 12.5 mm	R 1/2" (M) ²	R 1/2 (M) ²	A	20 bar - 300 psi	45 bar - 650 psi	26.5 kg	504 199 ¹
	HOT AND COLD WATER 150 °C - 300 °F MAXIMUM TEMPERATURE								
504 400	15 m - 50 '	3/8" - 16 x 10 mm	R 3/8" (M) ³	R 1/2 (F/M) ³	C	170 bar - 2,500 psi	680 - 10,000 psi	25.0 Kg	504 499 ¹
			OII	L, ANTIFREEZE, A	IR AND W	ATER			
504 200	15 m - 50'	1/2" -18 x 12.5 mm	R 1/2" (F/M) ³	1/2" (F/M) ³	D	100 bar - 1,500 psi	400 bar - 6,000 psi	28.5 Kg	504 299 ¹
				GREA!	SE				
504 300	15 m - 50'	1/4" - 14 x 6.4 mm	R 1/4" (M) ²	G 1/4" (F/M) ³	E	350 bar - 5,000 psi	1,400 bar - 20,000 psi	27.0 Kg	504 399 1
504 301	15 m - 50'	3/8" - 17 x 10 mm	R 1/4" (M) ²	G 3/8" (F/M) ³	E	280 bar - 4,000 psi	1,120 bar - 16,000 psi	29.8 Kg	504 399 1

- 1. Models supplied without hose. Maximum working pressure is the minimum working pressure of the individual components used, normally the hose.
- 2. Swaged male tapered threads.
- 3. Swaged 60° cone nut and 60° double thread male adapter.



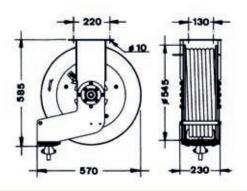
505 SERIES HIGH CAPACITY HOSE REELS

505 200

Applications: Delivery of low pressure air, water, AdBlue (DEF), diesel and medium pressure lubricants in vehicle maintenance centres, field service units and lubrication trucks, mining, construction, general industry, agriculture, etc.

505 SERIES - DOUBLE PEDESTAL ARM HOSE REEL





Heavy Duty reinforced double pedestal arm hose reel for low pressure air, water and Adblue (DEF) and medium pressure diesel and lubricants. All metal construction, can handle up to 15 m (50') of 3/4" hose or 20 m (65') of 1/2" hose.

Main features:

- Full 3/4" port shaft and swivel for maximum delivery with no flow restriction.
- Very robust reinforced all steel Heavy Duty construction with double pedestal arm design.
- Special fatigue resistant steel spring for years of durable performance.
- Epoxy powder coated for increased wear resistance.
- Positionable outlet arms for an optimum operation in any mounting position: wall, ceiling, floor or tank.
- Model 505 010 has stainless steel shaft and swivel and is compatible with AdBlue (DEF).
- No special maintenance required.

PART No.	HOSE LENGTH	HOSE DIAMETER NOMINAL - O.D. X I.D.	OUTLET THREAD	INLET THREAD	HOSE TYPE	HOSE PRESSURE RATING	HOSE BURST PRESSURE	NET WEIGHT	REEL WITHOUT HOSE PART No.
	COMPRESSED AIR, WATER, DIESEL AND LUBRICANTS								
505 200	20 m - 65'	1/2" - 20 x 12 mm	R 1/2" (M) ²	R 1/2 (M) ²	D	100 bar - 1,500 psi	400 bar - 6,000 psi	36 Kg	505 298 ¹
505 201	15 m - 50'	3/4" - 27,7 x 19 mm	R 3/4" (M) ²	R 3/4 (M) ²	D	100 bar - 1,500 psi	400 bar - 6,000 psi	38 Kg	505 299 1
				AdBlue	(DEF)				
505 010 ³	15 m - 3/4"	3/4" max.		model with no hose					505 010

- 1. Models supplied without hose. Maximum working pressure is the minimum working pressure of the individual components used, normally the hose.
- 2. Swaged 60° cone nut and 60° double thread male adaptor.
- 3. Model 505 010 is supplied with no hose.

SAMOA

506 SERIES - SINGLE ALUMINIUM ARM HOSE REEL

506 202



Applications: Delivery of compressed air, low pressure water and fluids; medium pressure lubricants, high pressure hot and cold water and high pressure grease in vehicle maintenance centres, general industry, agriculture, service stations, marine, aviation, etc.

Aluminium and composite material single arm hose reel for air, water, oil, antifreeze, windshield wash fluid, high pressure hot and cold water and grease with hose capacity up to $15 \text{ m} \times 1/2$ " hose.

Main features:

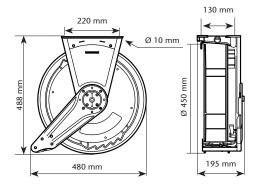
- Aluminium base and guide arm provides this reel with the rigidity to withstand even the most demanding applications, whilst offering a reduced weight for easy off installation (hose reel weight with $15 \text{ m} \times 1/2$ " hose is only 14.9 kg.)
- Epoxy powder coated aluminium base and arm, composite material spool and stainless steel fasteners provide superb corrosion resistance for working in damp environments.
- Nickel protected shaft and swivel for wear and corrosion resistance and wide fluid compatibility.
- Spool mounted on two permanently lubricated ball bearings for an easy pull out of the hose and better spring performance.
- Large effective radial latching area for easier operation.
- Round 6 roller hose outlet increases hose life, prevents hose pinching and reduces friction.



See models and part numbers on page 50

Single arm design allows easy maintenance: hose replacement and ratchet and swivel inspection can be done without disassembly of the reel.

Additionally, power spring tension can be adjusted on-site with the system under pressure and without the need to use any tool or to remove the hose stop and control valve, regardless of the reel height and mounting position. Spring tension can be increased simply by adding hose loops to the spool and it can be decreased by removing hose loops.







506 SERIES SINGLE ARM HOSE REELS. HOSE SPECIFICATIONS

MODELS AND SPECIFICATIONS		SINGLE ARM REELS 506 SERIES							
PART No.	HOSE LENGTH	HOSE DIAMETER NOMINAL - O.D. X I.D.	OUTLET THREAD	INLET THREAD	HOSE TYPE	HOSE PRESSURE RATING	HOSE BURST PRESSURE	NET WEIGHT	REEL WITHOUT HOSE PART No.
	COMPRESSED AIR AND LOW PRESSURE WATER								
506 101	10 m - 30'	3/8" - 17 x 10 mm	R 3/8" (M) ¹	R 1/2 (M) ¹	Α	20 bar - 300 psi	45 bar - 650 psi	12.1 Kg	506 920
506 121	15 m - 50'	3/8" - 17 x 10 mm	R 3/8" (M) ¹	R 1/2 (M) ¹	Α	20 bar - 300 psi	45 bar - 650 psi	14.2 Kg	506 922
506 122	15 m - 50'	1/2" - 20 x 12.5 mm	R 1/2" (M) ¹	R 1/2 (M) ¹	Α	20 bar - 300 psi	45 bar - 650 psi	14.9 Kg	506 912
HOT AND COLD WATER (150 °C - 300 °F MAXIMUM TEMPERATURE)									
506 421	15 m - 50'	3/8" - 16 x 10 mm	G 3/8" (F/M) ²	G 3/8 (F/M) ²	c	170 bar - 2,500 psi	680 bar - 10,000 psi	15.1 Kg	506 942
OIL, ANTIFREEZE, AIR AND WATER									
506 202	10 m - 30'	1/2" - 18 x 12.5 mm	G 1/2" (F/M) ²	G 1/2" (F/M) ²	D	100 bar - 1,500 psi	400 bar - 6,000 psi	12 6 Kg	506 920
506 222	15 m - 50'	1/2" - 18 x 12.5 mm	G 1/2" (F/M) ²	G 1/2" (F/M) ²	D	100 bar - 1,500 psi	400 bar - 6,000 psi	14.9 Kg	506 922
506 212	18 m - 60'	1/2" - 18 x 12.5 mm	G 1/2" (F/M) ²	G 1/2" (F/M) ²	D	100 bar - 1,500 psi	400 bar - 6,000 psi	15.7 Kg	506 924
				WASTE OIL S	UCTION				
506 503	6 m - 20'	5/8" - 23 x 16 mm	G 1/2" (F/M) ²	G 1/2" (FM) ²	D	100 bar - 1.500 psi	400 bar - 6.000 psi	13.3 Kg	506 950
		WINDSHIEL	D WASHER AN	D DEGREASERS (STAINLESS	STEEL SHAFT ANI	D SWIVEL)		
506 602	10 m - 30'	1/2" - 21 x 12.5 mm	G 1/2" (F/M) ²	G 1/2 (F/M) ²	В	20 bar - 300 psi	80 bar - 1,200 psi	13.0 Kg	506 960
506 622	15 m - 50'	1/2" - 21 x 12.5 mm	G 1/2" (F/M) ²	G 1/2 (F/M) ²	В	20 bar - 300 psi	80 bar - 1,200 psi	15.5 Kg	506 962
				GREAS	E				
506 300	10 m - 30'	1/4" - 14 x 6.4 mm	R 1/4" (M) ¹	G 1/4" (F/M) ²	E	350 bar - 5,000 psi	1,400 bar - 20,000 psi	12.4 Kg	506 930
506 301	10 m - 30′	3/8" - 17 x 10 mm	R 1/4" (M) ¹	G 3/8" (H/M) ²	E	280 bar - 4,000 psi	1,120 bar - 16,000 psi	12.9 Kg	506 934
506 321	15 m - 50'	3/8" - 17 x 10 mm	R 1/4" (M) ¹	G 3/8" (F/M) ²	E	280 bar - 4,000 psi	1,120 bar - 16,000 psi	16.0 Kg	506 936
506 311	18 m - 60'	3/8" - 17 x 10 mm	R 1/4" (M) ¹	G 3/8" (F/M) ²	E	280 bar - 4,000 psi	1,120 bar - 16,000 psi	17.0 Kg	506 935

 $Models \ with \ 18 \ m-60' \ of \ hose \ should \ be \ used \ in \ installations \ allowing \ a \ minimum \ of \ 3 \ m-10' \ of \ fluid \ hose \ hanging \ from \ the \ reel, \ and \ never \ with \ the \ hose \ totally \ coiled \ inside$ the reel.

All models with hose include a 0.8 m, 2.5' inlet hose.

HOSE SPECIFICATIONS

Hoses delivered with the hose reels are subject to the following specifications.

		TEMPERATURE RANGE		HOSE FITTING IN	FREE HOSE ENDS	HOSE FITTINGS FOR SHAFT AND SWIVEL CONNECTIONS		
HOSE	SPECIFICATION HOSE TYPE	MIN.	MAX.	DISTRIBUTION HOSE	INLET HOSE	DISTRIBUTION HOSE SWIVEL CONNECTION	INLET HOSE SHAFT CONNECTION	
A	Synthetic rubber (SBR). Synthetic textile braid.	-35 °C	+70 °C	Male BSPT, zinc plated steel.	Male BSPT, zinc plated steel.	Swept elbow female BSP 60° cone, zinc plated steel.	Swept elbow female BSP 60° cone, zinc plated steel.	
В	EPDM. Synthetic textile braid.	-40 °C	+ 95 °C	Stainless steel female BSP 60° cone and male BSP 60° cone adaptor.	Stainless steel female BSP 60° cone and male BSP 60° cone adaptor.	Stainless steel swept elbow female BSP 60° cone adaptor.	Stainless steel swept elbow female BSP 60° cone adaptor.	
c	Synthetic rubber (SBR). One steel braid.	-40 °C	+150 °C	Female BSP 60° cone and male BSP 60° cone adaptor, zinc plated steel.	Female BSP 60° cone and male BSP 60° cone adaptor, zinc plated steel.	Swept elbow female BSP 60° cone, zinc plated steel.	Swept elbow female BSP 60° cone, zinc plated steel.	
D	Nitrile rubber (NBR). One steel braid.	-40 °C	+100 °C	Female BSP 60° cone and male BSP 60° cone adaptor, zinc plated steel.	Female BSP 60° cone and male BSP 60° cone adaptor, zinc plated steel.	Swept elbow female BSP 60° cone, zinc plated steel.	Swept elbow female BSP 60° cone, zinc plated steel.	
E	Nitrile rubber (NBR). One high density steel braid.	-40 °C	+100 °C	Male BSPT, zinc plated steel.	Female BSP 60° cone and male BSP 60° cone adaptor, zinc plated steel.	Swept elbow female BSP 60° cone, zinc plated steel.	Swept elbow female BSP 60° cone, zinc plated steel.	

NBR: Nitrile butadiene rubber. SBR: Styrene butadiene rubber.

EPDM: Ethylene propylene diene M-class rubber.

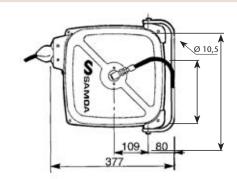
Swaged male tapered threads.
 Swaged 60° cone nut and 60° double male adaptor.

COMPACT REELS FOR AIR AND CABLE



COMPACT REELS FOR AIR 500 115





Compact enclosed reels for air, manufactured in steel. All reels include pivoting wall bracket for an easy and convenient installation. Reels include polyurethane and PVC hose with a maximum working pressure of 15 bar (285 psi)

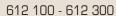
500 115 Compact hose reel for air 15 m x 8 mm hose

Compact reel for air and water with 15 m x 8 mm hose. Includes 0.8 m inlet hose and pivoting bracket. Inlet thread: 3/8" BSP (M). Outlet thread: 1/4" BSP (M).

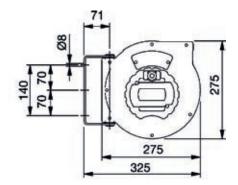
500 116 Compact hose reel for air 12 m x 10 mm hose

Compact reel for air and water with $12 \text{ m} \times 10 \text{ mm}$ hose. Includes 0.8 m inlet hose and pivoting bracket. Inlet thread: 3/8" BSP (M). Outlet thread: 3/8" BSP (M).

CABLE REELS







Compact reels with high resistance thermoplastic enclosure. Compact design, with wide outlet for a comfortable friction free cable extension. All reels include pivoting bracket, cable specified for each model, and cable overload breaker.

For use with 220 V – 50 Hz only.

612 100 - 220 V, 50 Hz cable reel

Includes 15 m H05VV-F 3x1.5 mm² cable, 230 V – 50 Hz.

Maximum power: 800 W with the cable coiled and 2000 W with the cable fully extended.

612 200 - 220 V, 50 Hz cable reel with 230 V AC to 24 V DC transformer

Includes 15 m H05VV-F 2x1 mm² cable.

Maximum power: 60 W Includes a 220 V AC to 24 V DC transformer, for use with an E27 24 V – DC lamp (lamp not included).

612 300 - 220 V, 50 Hz cable reel with 220 V AC to 12 V DC transformer

Includes 15 m H05VV-F 2x1 mm² cable. Maximum power: 60 W Includes a 220 V AC to 12 V DC transformer, for use with an E27 12 V – DC lamp (inspection lamp included, bulb not included).



HOSE REEL MOUNTING ACCESSORIES

* Brackets and stands, include the required nuts, bolts and washers for mounting the hose reels on to them.

WALL, CEILING AND FLOOR MOUNTING ACCESSORIES



360 119 FAST MOUNT BRACKET*

Facilitates mounting one reel to a wall or ceiling. Use with any Samoa reel.



360 111 PIVOTING WALL MOUNT BRACKET*

For open type hose reels (501 and 504 series) and individually enclosed reels (502 series).



360 121 PIVOTING WALL MOUNT BRACKET*

For single arm hose reels (506 series).



HOSE REEL BRACKETS FOR 200 LITRE TROLLEYS

To mount hose reels to trolleys. 432 814 and 432 000.

360 113 For trolley 432 814

360 135 For trolley 432 000



360 116 HOSE REEL BEAM BRACKET*

To hang an open reel 501 or 504 series or an enclosed reel 502 series from an "I" beam with flange width from 100 to 175 mm. Nuts and bolts included.





WALL AND CEILING MOUNTING ACCESSORIES

REEL MOUNTING CHANNELS*

For mounting a reel bank to the ceiling or wall. **360 114** For mounting a two reel bank. 550 x 308 mm.

360 115 For mounting a three reel bank. 825 x 308 mm.

360 117 For mounting a five reel bank. 1.375 x 308 mm.

360 118 Secures a reel bank bracket to an I-beam (minimum /maximum I-beam width; 100 / 175 mm) without drilling. Two brackets are required for the two and three reel bank channels and three brackets are required when mounting the five reel bank channel.

FLOOR MOUNTING ACCESSORIES REEL STANDS*

360 160 Six reel stand. Allows mounting up to six reels in a bank. Its use is recommended when it is not desired, or possible to hang reels from the ceiling. Ideal for service in two lubrication bays simultaneously.

Dimensions: Height: 2,500 mm, length: 1,640 mm, width: 700 mm.

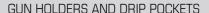
Includes paper roll support, waste basket, two perforated pannels, writing desk, drip collector tray and two drawers with lock.

360 163 Five reel stand. For mounting up to a five reel bank between two lubrication bays. Dimensions: Height: 2,215 mm, length: 1,550 mm, width: 450 mm.

360 162 Three reel stand. For mounting up to a three reel bank between two lubrication bays. Dimensions: Height: 2,400 mm, length: 1,200 mm, width: 310 mm.

360 161 Two reel stand. Height: 2,374 mm. Other stands available on request.

360 127 - 360 122 - 360 126







360 122, Wall mounted drip pocket

360 127, Wall mounted drip pocket and gun holder

360 126, Gun holder for hose reels

HOSE REEL KITS

515 213

505 201

Product specifications are subject to change without prior notice

SAMOA

INDIVIDUALLY ENCLOSED HOSE REEL KITS - 502 SERIES							
PART No.	HOSE REEL INCLUDED	CONTROL GUN					
COMPRESSED AIR							
512 102	502 100	AIR COUPLING					
512 103	502 101	AIR COUPLING					
	LO	W PRESSURE WATER					
512 150	502 100	LOW PRESSURE WATER GUN					
512 151	502 101	LOW PRESSURE WATER GUN					
		OIL, ANTIFREEZE					
512 200	502 200	OIL CONTROL GUN (363 077)					
512 255	502 200	HOSE END METER (365 603)					
512 252	502 200	PRESET HOSE END METER (365 300)					
		GREASE					
512 300	502 300	GREASE CONTROL GUN 413 080					
10 M OPEN	TYPE HOSE REEL KITS -	501 SERIES					
		COMPRESSED AIR					
511 101	501 100	AIR COUPLING					
	LO	W PRESSURE WATER					
511 150	501 200	LOW PRESSURE WATER GUN					
		OIL, ANTIFREEZE					
511 200	501 200	OIL CONTROL GUN (363 077)					
511 255	501 200	HOSE END METER (365 603)					
511 252	501 200	PRESET HOSE END METER (365 300)					
GREASE							
511 300	501 300	GREASE CONTROL GUN WITH Z SWIVEL (413 080)					
15 M OPEN	TYPE HOSE REEL KITS -	504 SERIES					
		COMPRESSED AIR					
513 154	504 100	AIR COUPLING					
	LO	W PRESSURE WATER					
513 154	504 100	LOW PRESSURE WATER GUN					
		OIL, ANTIFREEZE					
513 155	504 200	OIL CONTROL GUN (363 079)					
513 248	504 200	HOSE END METER (365 603)					
513 259	504 200	PRESET HOSE END METER (365 300)					
		GREASE					
513 350	504 300	GREASE CONTROL GUN WITH Z SWIVEL (413 080)					
HIGH CAPA(CITY HOSE REEL KITS - 5	05 SERIES					
		OIL					
515 216	505 200	OIL CONTROL GUN (363 079)					
515 214	505 200	HOSE END METER (365 603)					
515 215	505 200	PRESET HOSE END METER (365 300)					
		OIL, DIESEL					
515 210	505 201	HOSE END METER (365 603)					
515 201	505 201	HIGH DELIVERY HOSE END METER (365 652)					
E1E 212	505 201	DDECET HOSE END METER (265 200)					

PRESET HOSE END METER (365 300)



512 252

511 255

513 259

515 201





SINGLE ARM HOSE REEL KITS

PART No.	HOSE REEL INCLUDED	HOSE	CONTROL GUN	
TAINT NO.				
COMPRESSED AIR				
516 101	506 101	10 m x 3/8"	Air coupling control gun	
516 121	506 121	15 m x 3/8"	Air coupling control gun	
516 122	506 122	15 m x 1/2"	Air coupling control gun	
		LOW PRESS	URE WATER	
516 150	506 101	10 m x 3/8"	Low pressure water gun	
516 151	506 122	15 m x 3/8"	Low pressure water gun	
516 152	506 122	15 m x 1/2"	Low pressure water gun	
OIL				
516 202	506 202	10 m x 1/2"	Oil control gun 363 078	
516 242	506 202	10 m x 1/2"	Hose end meter 365 603	
516 252	506 202	10 m x 1/2"	Preset hose end meter	
516 222	506 222	15 m x 1/2"	Oil control gun 363 078	
516 272	506 222	15 m x 1/2"	Hose end meter 365 603	
516 282	506 222	15 m x 1/2"	Preset hose end meter	
516 212	506 212	18 m x 1/2"	Oil control gun 363 078	
516 213	506 212	18 m x 1/2"	Hose end meter 365 603	
516 214	506 212	18 m x 1/2"	Preset hose end meter	
		ANTIFREEZE, A	IR AND WATER	
516 262	506 202	10 m x 1/2"	Fluid control gun 186 300	
516 292	506 222	15 m x 1/2"	Fluid control gun 186 300	
516 215	506 212	18 m x 1/2"	Fluid control gun 186 300	
WIND	SHIELD WASH	ER AND DEGREASER	S (STAINLESS STEEL SHAFT AND SWIVEL)	
516 602	506 602	10 m x 1/2"	Fluid control gun 186 300	
516 622	506 622	15 m x 1/2"	Fluid control gun 186 300	
GREASE				
516 300	506 300	10 m x 1/4"	Grease control gun 413 080	
516 321	506 321	15 m x 3/8"	Grease control gun 413 080	



516 202

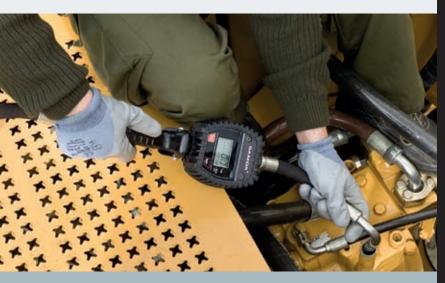


516 300

05

METERING AND CONTROL EQUIPMENT

UIL CONTROL GUNS	56
FLUID CONTROL GUN, OIL BAR	57
GREASE CONTROL GUNS	58
HOSE END METERS FOR OIL	59
HOSE END METERS FOR GREASE AND OTHER SERVICE FLUIDS	61
IN-LINE METERS	62
CONTROL GUN AND HOSE END METER ACCESSORIES	63
ADVANCED MONITORING SYSTEM	64
INVENTORY MANAGEMENT CONSOLE	67
TANK ALERT AND TANK MANAGEMENT SYSTEM	69





OIL CONTROL GUNS



363 078 - 363 077

363 051







OIL CONTROL GUNS

Oil control guns, manufactured in aluminium, with ergonomic grip and trigger to reduce operator hand fatigue. NBR valve with progressive action, for comfortable operation when dispensing products, even with high ratio (10:1) oil pumps. All guns include a ball bearing inlet swivel with large capacity screen filter.

Maximum working pressure: 105 bar (1,500 psi). Maximum delivery: 25 l/min (6.6 US gpm). Fluid inlet thread: 1/2" NPSM (F).

Guns available with a variety of outlets to fit every application.

MODELS			
PART No.	APPLICATION	OUTLET TYPE INCLUDED	NON DRIP NOZZLE INCLUDED
363 082		None	None
363 075	Gear oil	110° rigid swiveling (369 217)	Manual
363 077	ATF , lubricants	Straight flexible (369 200)	Manual
363 078	All types of lubricants	Flexible with 90° outlet, swiveling (369 218)	Semi automatic
363 079	Motor oil	60° rigid (369 215)	Semi automatic

HIGH DELIVERY OIL CONTROL GUN

363 051 High delivery oil control gun

High delivery oil control gun manufactured in aluminium. A double valve mechanism allows small flow deliveries when the trigger is partially open and full flow delivery when the trigger is fully pressed. Lockable trigger and ball bearing inlet swivel. This oil gun includes a 60° angled rigid outlet with semiautomatic non drip nozzle.

Maximum working pressure: 105 bar (1,500 psi). Maximum delivery: up to 45 l/min (11.7 US gpm). Fluid inlet thread: 3/4" BSP (F).



186 300 361 200



FLUID CONTROL GUN

186 300 Fluid control gun

and stainless steel valve mechanism for use with fluids like windshield washer, glycol solution (anti-freeze) and other water based fluids. Includes brass inlet swivel and flexible outlet with 90° angled outlet. Maximum working pressure: 40 bar (570 psi). Maximum flow: 15 I/min (4 US gpm). Inlet thread 1/2" BSP (F).

Control gun with reinforced polyamide body



OIL BAR

361 200 Oil bar

Oil dispensing bar for up to four products. Delivered with one outlet, up to 3 additional outlets can be mounted.

361 110 Additional outlet valve for oil bars.

366 550 In-line meter kit for oil bars

An in-line meter can be mounted as an option.

See pag 63 for accessories.



GREASE CONTROL GUNS

413 077



GREASE CONTROL GUNS

High pressure grease control guns with ergonomic body and trigger designed to reduce operator hand fatigue. Manufactured in aluminium with steel high pressure section.

Maximum working pressure: 500 bar (7,150 psi). Inlet thread: 1/4" BSP (F), outlet thread: 1/8" BSP (F).

413 077 Grease control gun

Grease control gun with rigid outlet with 3 jaw connector (PN 121 050).

413 080 Grease control gun with z-swivel

Grease control gun with z-swivel (PN 414 300), rigid outlet and 3 jaw connector (PN 741 300).

413 081 Grease control gun

Grease control gun with 450 mm double steel braid reinforced rubber hose (PN 140 050) with 3 jaw connector (PN 121 050).

413 082 Grease control gun with z-swivel

Grease control gun with z-swivel (PN 414 300) and 450 mm double steel braid reinforced rubber hose (PN 140 050) with 3 jaw connector (PN 121 050).

See pag 63 for accessories.



365 853 365 603





METER WITH MECHANICAL DISPLAY

Oval gear meter with mechanical odometer style register, for use with lubricants up to SAE 140. Resettable partial reading up to 999.9 litres and non-resettable totalizer. Meters are factory calibrated for maximum accuracy and include protective rubber shroud.

The meter is flange coupled to a durable but light weight oil control gun that incorporates a rugged ball bearing inlet swivel with filter.

Maximum working pressure: 70 bar (1,000 psi). Oil flow range: 1 to 27 l.p.m. (0.26 to 7.1 US gpm). Fluid inlet thread: 1/2" BSP (F).

365 853 Hose end meter with mechanical register, litres

Includes outlet 369 218.

365 851 Hose end meter with mechanical register, litres

No outlet.

365 854 Hose end meter with mechanical register, quarts/US gallons

Includes outlet 369 218.

365 852 Hose end meter with mechanical register, quarts/US gallons

No outlet.

METER WITH ELECTRONIC DIGITAL DISPLAY

Oval gear meter with electronic digital LCD display 366 750 coupled to a durable but lightweight oil control gun that incorporates a rugged ball bearing swivel with inlet screen filter. Meter is supplied with a protective rubber shroud.

Meters are factory calibrated. Also they, can easily be re-calibrated in the field for increased accuracy. Meter can measure in litres, quarts, pints and US gallons.

Maximum working pressure: 105 bar (1,500 psi). Oil flow range: 0.5 to 25 l/min. (15 to 6.6 US gpm). Fluid inlet thread: 1/2" BSP (F).

MODELS		
PART No.	APPLICATION	OUTLET TYPE
365 601		None
365 602	Motor oil	60° angled rigid outlet with semi automatic non drip tip.
365 603	All types of lubricants	Flexible outlet with 90° rigid stem, swiveling, with semi automatic non drip tip.
365 604	ATF	Straight flexible outlet with manual non drip tip
365 605	Gear oil	110° angled rigid swiveling outlet with manual non drip tip.

See pag 63 for accessories.



HOSE END METERS FOR OIL

365 652

365 300

365 710





365 652 High delivery hose end meter

Oval gear hose end meter with electronic digital LCD display for metered delivery of lubricants up to SAE 140. The display is powered by two easily replaceable AAA 1.5 V alkaline batteries. The meter is coupled to a high delivery oil control gun that incorporates a rugged ball bearing inlet swivel with an inlet filter and 60° rigid outlet with semi automatic non drip nozzle. All hose end meters are supplied with a protective rubber shroud.

Maximum working pressure: 105 bar (1,500 psi). Maximum flow range: up to 25 l/min (6.5 US gpm). Fluid inlet thread: 3/4" BSP (F).



PRESET HOSE END METER

365 300 Preset digital meter

Oval gear hose end meter with preset function. Preset mode dispensing allows hands off operation as the meter automatically shuts off the oil once the preset volume is delivered.

Meter with digital display, works with four easy to replace 1.5 AA alkaline batteries. Includes rigid outlet with non drip nozzle and inlet swivel



WEIGHTS AND MEASURES APPROVED HOSE END METER

365 710 Weights and Measures approved hose end meter

Oval gear hose end meter with digital display approved by German Weights and Measures aurothority (PTB).

Includes calibration certification, protective shroud, inlet swivel and sight glass. Order outlet accessory separately.



365 675 415 002





HOSE END METER FOR OTHER SERVICE FLUIDS

365 675 Hose end meter for other service fluids

Oval gear hose end meter with electronic digital LCD display for measured delivery of fluids such as windshield washer, glycol solution and other water based fluids. Display is powered by two easily replaceable AAA 1.5 V alkaline batteries. The meter has two separate displays in litres, a resettable 4 digit batch display and a permanent totalizer. Meters are factory calibrated and they can easily be re-calibrated in the field for increased accuracy. Meter can measure in litres, quarts, pints and US gallons.

The meter is coupled to fluid control gun (PN 186 300).

Maximum working pressure: 40 bar (570 psi). Flow range: 5 to 15 l/min (1.3 to 4 US gpm). Fluid inlet thread: 1/2" BSP (F).

HOSE END METER FOR GREASE

High pressure oval gear meter with electronical digital LCD display for accurate greasing. The display is powered by two easy to replace AAA 1.5 V alkaline batteries and shows the amount delivered in grams (up to 9,999 gr) and a permanent totalizer in kilograms (up to 999,999 kg). Includes a batch display reset button. Meters are factory calibrated and they can easily be recalibrated in the field for increased accuracy. The meter is coupled to a high pressure grease control gun with ergonomic body and trigger to reduce operator hand fatigue.

Maximum working pressure 500 bar (7,150 psi).

415 002 High pressure grease hose end meter Includes:

Double steel braid reinforce rubber hose (400 mm) with hydraulic grease connector and Z swivel.

415 000 High pressure grease hose end meter Includes:

Z-swivel, with no outlet accessories.

See pag. 63 for accessories.



IN-LINE METERS

411 100

OVAL GEAR IN LINE GREASE METER WITH ELECTRONIC DIGITAL DISPLAY



411 100 In line grease meter

High pressure oval gear meter with electronic digital LCD display. Batch display in grams (up to 9,999 gr) and permanent totalizer in kilograms (up to 999,999 kg). Batch display reset button. Meters are factory calibrated and they can easily be re-calibrated in the field for increased accuracy. Works with two 1.5 V AAA alkaline batteries. Maximum pressure: 500 bar (7,140 psi). Maximum flow range: up to 1 kg/min (2.2 lb/min). Accuracy: \pm 3,0 %. Inlet and outlet connections: 1/8" BSP (F). Includes one 1/8" BSP (MM) connector.

366 750 - 836 504

OVAL GEAR IN LINE OIL METER WITH ELECTRONIC DIGITAL DISPLAY



366 750 In-line oil meter with electronic digital display

Oval gear meter with electronic digital LCD display for use with lubricants up to SAE 140. The display is powered by two easy to replace AAA 1.5 V alkaline batteries. The meter has a multifunction display, showing in a large four digit display the volume dispensed in each transaction, and two totals, one permanent and another resettable, which might be used for recording the total volume dispensed during one work shift, the volume of oil left in a drum or tank, etc. Meters are factory calibrated and they can easily be re-calibrated in the field for increased accuracy. Meter can measure in litres, quarts, pints and US gallons.

Maximum working pressure: 105 bar (1,500 psi). Oil flow range: 0.5 to 25 l/min (15 to 6.6 US qpm). Fluid inlet and outlet threads: 1/2" BSP (F). Accuracy: ± 0.5 %

Accessory:

• 836 504: Protective rubber shroud for meter 366 750.

366 850

OVAL GEAR IN LINE OIL METER WITH MECHANICAL DISPLAY



Oval gear meter with mechanical odometer style register for use with lubricants up to SAE 140. Resettable partial reading up to 999.9 litres and non-resettable totalizer. Meters are factory calibrated for maximum accuracy and include protective rubber shroud.

Maximum working pressure: 70 bar (1,000 psi). Oil flow range: 1 to 27 lpm (0.26 to 7.1 US gpm). Fluid inlet and outlet threads: 1/2" BSP (F). Includes protective rubber shroud. Accuracy: ±1%

366 850 Oval gear in-line meter

With mechanical register in litres.

366 851 Oval gear in-line meter

With mechanical register in quarts / US gallons.

366 725 - 366 726

HIGH FLOW IN LINE METERS WITH ELECTRONIC DIGITAL DISPLAY



Oval gear in line meters with electronic digital LCD display. The meter has two separate displays: a resettable 4 digit batch display and a 6 digit permanent totalizer. Meters are factory calibrated and they can easily be re-calibrated in the field for increased accuracy. Meters can measure in litres, quarts, pints or gallons. Meters are compatible with lubricants up to SAE 240, diesel and glycol solutions.

366 725 High flow in-line meter 50 litres/min

Works with two AAA alkaline batteries.

Maximum working pressure: 70 bar (1,000 psi). Maximum working temperature: 60 °C (140 °F).

Flow range: 5.5 l/min (1.45 US gpm); to 50 l/min (13.2 US gpm).

Accuracy: ±0.5 %.

Pressure drop: 0.5 bar (7 psi). Inlet and outlet threads: 1/2" BSP (F).



366 726 High flow in-line meter 100 litres/min

Works with two AAA alkaline batteries.

Maximum working pressure: 30 bar (430 psi). Maximum working temperature: 60 °C (140 °F).

Flow range: 9.5 I/min (2.5 US gpm); to 100 I/min (26.4 US gpm).

Accuracy: ±0.5 %.

Pressure drop: 0.5 bar (7 psi). Inlet and outlet threads: 1" BSP (F).

CONTROL GUN AND HOSE END METER ACCESSORIES



GREASE CONTROL GUN SWIVELS

414 100 - 414 300

Equipped with ball bearings for easy articulation even at high pressure. For best results, use a straight swivel between the pump and distribution hose and Z swivel between the hose and grease control gun. Maximum working pressure: 500 bar (7,150 psi).

414 100 Straight grease swivel. 1/4" BSP (MF).

414 200 "L" grease swivel. 1/4" BSP (MF).

414 300 "Z" grease swivel. 1/4" BSP (MF).





GREASE CONTROL GUN OUTLETS

140 050 - 741 300

741 306 Rigid outlet with 3 jaw hydraulic grease connector (121 001). **741 300** Rigid outlet with 3 jaw hydraulic grease connector (121 105).

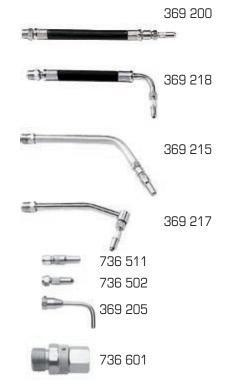
140 050 Double steel braid reinforced grease hose, 450 mm.

741 304 Rigid outlet.



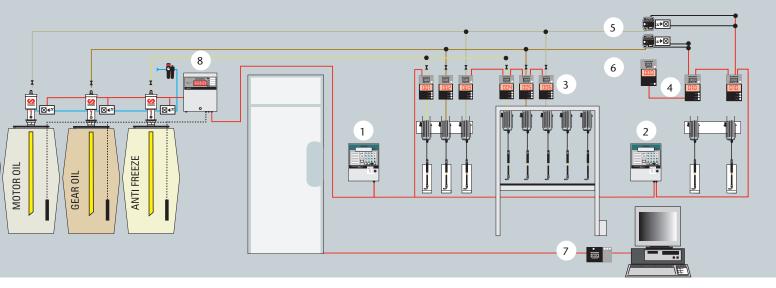
OIL GUN AND OIL HOSE END METER ACCESSORIES

PART No.	APPLICATION	OUTLET TYPE INCLUDED	NON DRIP NOZZLE		
OUTLETS FOR HOSE END METER 365 601					
369 217	Gear oil	110° rigid swiveling	Manual		
369 200	ATF (transmission fluid)	Straight flexible	Manual		
369 218	All types of lubricants	Flexible with swiveling 90° stem	Semiautomatic		
369 216	All types of lubricants	Flexible with swiveling 90° stem	Manual		
369 215	Motor oil	60° rigid	Semiautomatic		
OUTLET FOR HIGH DELIVERY HOSE END METER 365 652 AND 365 652.300					
369 219	Lubricants, high delivery	60° rigid	Semiautomatic		
	NOI	N DRIP NOZZLES			
736 511	Semiautomatic non drip nozzle.	Semiautomatic non drip nozzle.			
736 502	Manual non drip nozzle				
736 522	Semiautomatic non drip nozzle. For use with 365 652 high delivery hose end meters.				
369 205	90° angled adaptor. For use with manual operated non drip nozzles.				
SWIVELS					
364 021	3/4" BSP (F) oil inlet swivel. hose end meter.	For use with 365 652 high deli	ivery		
736 601	1/2" BSP (F) oil inlet swivel.	For use with standard hose end	d meters.		
836 404	Oil filter. To be placed between	n a hose and 1/2" swivel.			





ADVANCED MONITORING SYSTEM



- AMS ACCESS KEY PAD WITH APPLICATION SOFTWARE MEMORY MODULE (PN 381 001 + PN 381 600)
- 2 AMS ACCESESS KEY PAD (PN 381 001)
- 3 INTELLIGENT FLOW CONTROL UNIT (PN 381 500)
- 4 INTELLIGENT FLUID DISPENSE MANAGER (PN 381 550)
- 5 PULSEMETER AND SOLENOID VALVE (PN 600 281 + PN 389 001)
- 6 REMOTE DISPLAY UNIT (PN 381 700)
- 7 NETWORK PROTOCOL CONVERTER (PN 381 300)
- 8 TANK INVENTORY SYSTEM (PN 382 100)

Fluid Management in today's shops poses several challenges. As the size of the shop increases, properly dispensing and controlling fluids challenges older system and equipment. Additionally, the increased cost of today's lubricants and the popularity of synthetic lubricants place a higher demand for the proper accounting of lubricants usage. Samoa is proud to lead the industry with our proven offering of inventory and fluid dispense management products. From the simplest entry level console to sophisticated computerized management system, we can supply the equipment required for the professional management of both new and used fluids. The Advanced Monitoring System (AMS), the software at the heart of our state-of-the-art fluid and inventory management system, has been installed in several thousand facilities around the world. Based on our experience in the design of systems for fluid monitoring and the management of workshop activities, we have brought true innovation to an old concept. We have created a system designed to improve profitability through controlled fluid distribution workorder accountability. The system's ease of integration allows you to design any size of installation using a minimum number of components, adaptable from a single-point dispense system to the largest system including more than 100 fluid outlets. This modularity also allows the integration of complementary functions, such as remote displays, stock level detectors, volumetric measuring probes, control access points and the automatic scheduling of any "on/off" function and guarantees the possibility of future evolution should new needs arise.

The network topology utilized by the AMS is the CANBUS network, which was originally developed to manage all the functions of an automobile through one single cable. This technology gives the system a unique simplicity of installation, whilst offering the highest reliability, accuracy and speed of communications. CANBUS networks are used throughout industry, whenever a highly reliable network is required.

The AMS is designed to satisfy the needs of:

- **A.** The user, who will be guided during the delivery transaction by a rolling menu and who will also have access to innovative functions like automatic identification by coded key, multi-fluid delivery againts for one work order and top up option on request
- **B.-** The supervisor, who will have access to a wide choice of parameters that will allow him to set up the system management criteria to best meet his specific needs. Through easy to use rolling menus, he will be able to modify operator authorizations, to adjust tank levels and to access a wide range of statistics.
- C.- The installer, who will be able to easily install and set up the system.

Directly connected to the mains electricity supply (115 / 230 V) the AMS keypad has an internal 24 VAC power supply that provides the electrical power for 1 to 8 outlets. The number of AMS keypads in a system depends on the layout of the workshop and it is not limited. The AMS keypad can manage up to 110 outlets, each equipped with an Intelligent Flow Control Unit.

The entire system can be controlled through a PC using a PC interface and communications adapter together with special software. It also allows communication with the workshop Data Management System using an additional software module.

The AMS system can also integrate the Advanced Tank Management System. This allows an accurate control of oil inventory and the automatic updating of inventories whenever lubricants are delivered. It also allows a pump to be stopped whenever the oil inside the tank is below a critical level, so eliminating the possibility of air getting into the fluid distribution system.



381 501 381 001



INTELLIGENT FLOW CONTROL UNIT (IFCU)

Controls all parameters related with the distribution of fluids and integrates in one single module component all of the following elements:

- A large capacity filter easily accessed for cleaning.
- A double channel pulse transmitter for accurate and reliable metering.
- A solenoid valve to control the fluid line.
- A microprocessor CPU for the fluid outlet management.
- A large 3 digit very bright display that shows the volume dispensed during the transaction and the outlet number when the outlet is not in use. In most applications, there is no need for a hose end meter.
- Three LED lights that show the IFCU status.

The IFCU connection to the fluid distribution line is done through 1/2" threaded ports. Its connection to the electronic network is done through 2 standard plug in electrical connectors (network IN / network OUT).

381 501 Intelligent Flow Control Unit with CAN controller 100 PPL

Connection threads: 1/2" BSP (F).

381 500 Intelligent Flow Control Unit with CAN controller 100 PPL and installation accessories

Includes electrical connectors and two 90° fittings for connection to the fluid distribution line. Connection threads: 1/2" BSP (F).

381 903 Set of electrical connectors

381 953 IFCU connection cable

500 mm cable with connectors on both ends for connecting IFCUs when installed in a bank.



ACCESS KEYPADS

To be mounted in the workshop to provide technicians with remote access to outlets or reels. Access keypads include a coded key reader for user identification. As an option, a bar code reader can be connected to the access keypad for user identification, job order or job description registration. The access keypad also includes a slot for housing the application software memory module (381 600 - one software memory module is required for each installation).

Sturdy metal casing for durability, 25 key alphanumeric keyboard and 2×16 digit back lit LCD display.

381 001 AMS Access keypad with ticket printer

Includes a thermal ticket printer that prints a report after each transaction that includes the following information:

- Date and time of the transaction.
- Job order number.
- Product supplied.
- Volume supplied.
- Hose reel / outlet used.
- User I.D. / name
- Vehicle registration number (optional).
- Vehicle odometer reading (optional).
- Inventory of the fluid supplied remaining after the transaction.

Additionally, a warning message is displayed when the fluid inventory reaches the warning level previously assigned by the supervisor.

381 000 AMS Access keypad without ticket printer

381 600 Application software memory module

To be inserted into its slot in the access keypad, includes the system operating software. One memory module must be used with every system.

381 905 Five coded keys set



ADVANCED MONITORING SYSTEM

381 300

NETWORK PROTOCOL CONVERTER AND SOFTWARE (NTPC)



381 300

The CAN network uses a different communication system to the one usually available on PCs. The network protocol converter allows reliable communication with a PC through a RS232 serial port connector.

The PC software delivered with the NTPC is user-friendly and it takes full advantage of the flexibility and the wide possibilities of the AMS. This software supports both daily operations and statistical analysis, to help develop sales and increase profit. The software runs on a PC, in a WINDOWS environment help and uses an ACCESS database.

381 550

INTELLIGENT FLUID DISPENSER MANAGER (IFDM)



381 550

The IFDM manages the flow control units whenever the system requires a special pulse meter or solenoid valve (type of fluid, flow rate, pressure, etc.). It has the same electronic management functions as the IFCU. It connects to the CAN network through 2 standard electrical connectors (Network IN / Network OUT). The unit also provides the power to operate a solenoid valve to control a fluid line and accepts the input from a pulse meter.

381 700

REMOTE DISPLAY UNIT (RDU)



381 700

High visibility 3-digit very bright display, identical to the IFCU display. It displays in real time the delivery details of any transaction in a remote location. It is particularly useful when a hose reel is mounted onto a frame, which can be used from both sides. One RDU can display the delivery of any IFCU present on the network.

381 913 - 381 912 - 381 910 - 381 911 ACCESSORIES



381 102 Additional power supply box

Each access keypad has a power supply box that provides energy to the system for opening and closing up to eight solenoid valves. An additional power net box is required when one single keypad needs to control more than eight hose reels.

381 904 External RS-422/RS-232 Converter



Ticket printer for installation inside the access keypad.



Comunications cable to connect system elements, adequate in most installations.



For connection of very distant elements or when the number of elements in a system is very large.

736 353 Wall bracket for 381 000 or 381 001 Keypads

381 913 IFCU bracket for enclosed reels (502 series)

381 912- IFCU bracket for open reels (501 and 504 series)

736 349 Bracket for mounting up to 6 IFCUs (381 500) on top of a six hose reel stand. Requires brackets 381 911 and 381 910 and cover 736 377

381 911 IFCU bracket. Use together with 736 349.

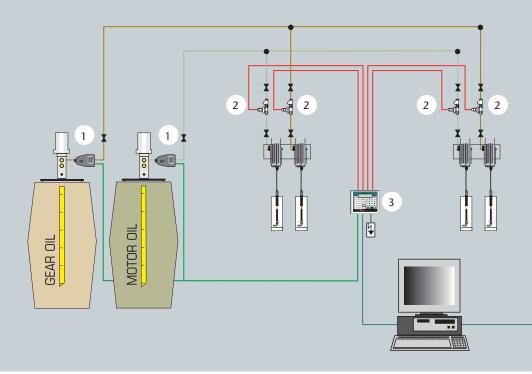
381 910 IFDM or remote display (RDU) bracket. Use together with 736 349.

736 377 Cover

It covers the open area of bracket 381 911 when no IFCU is installed.







- 1 PULSE METER (MAX. 2)
- 2 SOLENOID VALVE (MAX. 10)
- 3 KEY PAD MODULE

This powerful console is designed for shops that want simple control of their fluids. IMC offers ease of operation, great value and several features not previously available in entry level Fluid Management and Control System.

IMC works with one pulse meter at each pump (maximum two pulse meters) and a solenoid valve at each fluid outlet (maximum 10 solenoid valves in total). The system does not allow simultaneous operation outlets with the same fluid; however different fluids can be dispensed simultaneously. An upgraded Inventory Management Console, which allows connection to a PC, is available. PC connection makes setting and maintaining the system parameters easier and it is a powerful inventory control tool that allows tank level monitoring to alert the oil vendor or the shop purchase department with an email when the oil inventory level is low.

IMC standard features and capabilities are:

- Controls one or two fluids and up to 10 dispense points. Manages simultaneous dispensing of two different fluids.
- Up to 200 users, system access through pin number or coded key.
- Allows control of one air valve, so air supply is only available during service operating hours.
- Inventory management on a declining balance: allows initial inventory to be entered and deducts for each dispense. Manager needs to enter each delivery and the console alerts when inventory level is low.
- Two operation levels, user and manager levels. At user level it is only possible to order a dispense. At manager level is possible to adjust inventory levels, set inventory warning levels and perform other management functions.
- The system requires 115 to 240 VAC mains power.
- Can work with metric or US units of measure.



INVENTORY MANAGEMENT CONSOLE

381 002

IMC COMPONENTS



381 002 Inventory management console module

Access keypad designed to monitor and control fluid dispenses in a workshop from a single or central location. It can control a total of 10 different outlets with two different fluids. The unit tracks fluid dispenses for every single work order and provides additional information regarding each fluid such as current stock, reorder level and stop level. The IMC can also manage a solenoid valve to control the air powering the pumps, either according to a service planning schedule or from a command entered on the keypad by a manager. Four float type level switches provide the signals to control waste fluid levels in two waste fluid tanks and prevent overflow of used oil by disabling the waste product pump.

381 003 Inventory management console module with PC connection

Similar to model 381 002 plus includes a validation chip and PC software that enables the setting and maintaining of system parameters through a PC. Also, the PC can alert the oil vender or shop Purchasing Department with an email when the oil inventory level is low.

600 281

600 600

389 001







PULSE METER

600 281 In line pulse meter

Line meter with 328 pulses per litre pulse transmitter output. For connection to each pump outlet or to the Advanced Monitoring System when using the Intelligent Fluid Dispenser Manager (PN 381 550). Meter does not have display or function buttons. Equipped with connection terminal and reel open indication light. For use with lubricants.

Inlet-Outlet: 1/2" BSP (M) with 60° cone seal. Minimum flow: 1.5 l/min (0.4 US gpm). Maximum flow: 15 l/min (4 US gpm). Maximum working pressure: 50 bar (715 psi).

600 600 In line pulse meter for wind shield wash and antifreeze

Line meter with 328 pulses per litre pulse transmitter output. For connection to each pump outlet or to the Advanced Monitoring System when using the Intelligent Fluid Dispense Manager (PN 381 550). Meter does not have display or function buttons.

Manufactured in stainless steel with Viton seals. Equipped with connection terminal and inlet strainer. For use with windscreen wash fluids, detergents and antifreeze mixed with water. Inlet-Outlet: 1/2" BSP (M) with 60° cone seal. Minimum flow: 1.5 I/min (0.4 US gpm). Maximum flow: 30 I/min (8 US gpm).

Maximum flow: 30 l/min (8 US gpm). Maximum working pressure: 150 bar (2,150 psi).

SOLENOID VALVE

389 001 Solenoid valve

24 V DC solenoid valve for oil, glycol and wind screen washing fluids.

Inlet - Outlet: 1/2" BSP (F). Maximum working pressure: 50 Bar (715 psi).

TANK ALERT AND TANK MANAGEMENT SYSTEMS



TANK ALERT SYSTEM 382 001- 382 010

Protects the pump from running dry and the waste oil tanks from overflowing. The module can accept up to four tank level sensors, e.g. three low level sensors in fresh oil tanks and one high level sensor in a waste oil storage tank. The unit includes four indicator LEDs and an acoustic alarm signal that give a warning when each of the tanks reaches a critical level. 230 V – 50 Hz AC.

When the Tank Alert System is connected to an Advanced Monitoring System, AMS, it provides signals to warn of a high level in the waste oil tank (to prevent overflow) and to warn of low levels in the new oil tank, making possible to automatically close a solenoid valve in the pump air supply (to prevent air entering the fluid lines and to stop the pumps running dry).

382 001 Tank Alert module

382 050 Tank Alert module for AMS

Connected to the AMS system, when the Tank Alert system is connected to AMS, provides signals to warn of a high level in the waste oil tank (to prevent overflow) and to warn of low levels in the new oil tank (to prevent air entering the fluid lines and to stop the pumps running dry).

382 010 High level sensor

For use with models 382 050 and 382 001. Fits into 2" bung openings.

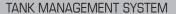
382 012 Low level sensor

For use with models 382 050 and 382 001. Fits into 2" bung openings.

382 005 Flashing alarm light

For use with models 382 050 and 382 001.

389 001, 24 V solenoid valve



Control module for monitoring the volume in up to four tanks using barometric level sensors. The level sensors provide accurate measurement of the volume in each tank and it is possible to set critical control threshold levels that define when the Tank Management System should stop the air supply to each pump (using a solenoid valve PN 389 001). The system can work as a stand-alone unit or as part of an Advanced Monitoring System AMS and it is.

When used as a stand-alone unit, the system is set up using an access keypad (PN 382 110). This keypad is used to set up tank parameters and the threshold levels and the actions required from the system, such as closing a solenoid valve that controls the air supply to a pump. Optionally, the system can be controlled and set up though a PC using a software pack that includes a validation chip that must be installed inside the access keypad.

When used with an AMS system, the Tank Management System is connected directly to any keypad in the system (AMM version 3.1.3 or higher) and it transmits accurate real time information about the inventory in the oil tanks, increasing system security, and reliability of the oil inventories. This way manual inventory adjustments are no longer required, for example when new oil is supplied into a tank. When the AMS is running connected to a PC, using AMS-WIN PC version 2.1 or higher, the tank inventory system is controlled and set up through the AMS software.

382 100 Tank Management System module

382 110 Tank Management System access keypad

Required to set-up the system when working as a stand-alone unit.

382 115 PC software kit for Tank Management System

Includes software and validation chip.

382 120 Level sensor for Tank Management System

Tank maximum depth 400 cm.



382 100 - 382 120

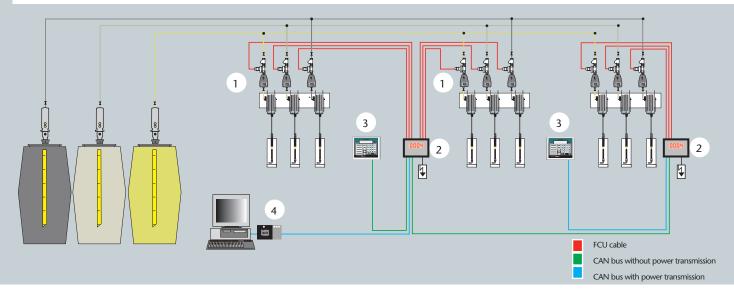








CONTROL MASTER OIL MONITORING SYSTEM



- 1 FLOW CONTROL UNIT (MAX. 6 PER INPUT/ OUTPUT BOX).
- 2 INPUT/OUTPUT BOX WITH REMOTE DISPLAY.
- 3 ACCESS KEYPAD.
- 4 NETWORK PROTOCOL CONVERTER NTPC.



Modular fluid monitoring and security system for small to medium size applications. It can be used to cover applications from a single access point keypad control system through to a multi-dispense point, multi-access, PC linked system.

SYSTEM COMPONENTS 381 060 Acces keypad

Alphanumerical keypad to be mounted in the workshop allowing technician remote access to outlets / reels using numerical ID authorisation. It also allows.

381 150 Input / output control unit

Provides control to up to 6 outlets and communication between different keypads. Several Input / Output Control Units can be used in a system whenever there are more than six outlets in the system. Includes power supply unit. Voltage input: 110 - 240 V.

381 300 Network protocol converter and software (NTPC)

The network protocol converter allows reliable communication with a PC, through a RS232 serial port connector.

The PC software delivered with the NTPC is user-friendly and it takes full advantage of the flexibility and the wide possibilities of the fluid monitoring System. This software supports both daily operations and statistical analysis, to help develop sales and increase profit. The software runs on a PC, in a WINDOWS environment and uses an ACCESS database.

PULSE METERS

*600 281 In line pulse meter

*600 600 In line pulse meter for wind shield wash and antifreeze

SOLENOID VALVE

*389 001 Solenoid valve

FLUID CONTROL UNITS

Line meter with 328 pulses per litre and solenoid valve assembly. The line meter monitors the fluid flow and sends electronic pulses to the Input/Output unit. The solenoid valve opens and closes the hose reel selected. Meter and valve are constructed and tested to guarantee accurate and safe function.

380 550 Fluid control unit for oil and antifreeze

Includes line meter 600 281 and solenoid valve 389 001. Unit also includes Y strainer at the fluid inlet. Connection threads: 1/2" BSP (MM) with 60° cone seal.

380 551 Fluid control unit for windscreen washer and detergents

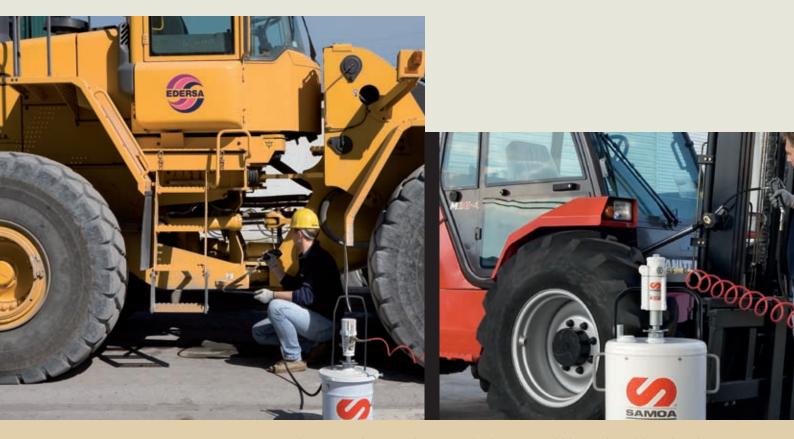
Includes line meter 600 600 and solenoid valve 389 001. Unit also includes Y strainer at the fluid inlet. Connection threads: 1/2" BSP (MM) with 60° cone seal.

^{*}See pag. 68, for more information.

06

MOBILE UNITS

MOBILE GREASE UNITS WITH PUMPMASTER 3 PUMPS	72
MOBILE GREASE UNITS FOR DRUMS WITH PUMPMASTER 3+3 PUMPS	75
MOBILE EXTRUSION UNITS	77
SELF CONTAINED OIL DISPENSERS	78
MOBILE UNITS OIL DISPENSER	80
MOBILE DISPENSERS FOR OTHER SERVICE FLUIDS	81
ORLIM TROLLEYS	82



MOBILE AND PORTABLE EQUIPMENT IS A SIMPLE AND COST EFFECTIVE SOLUTION FOR TRANSFERRING AND DISPENSING LOW CONSUMPTION LUBRICANTS OR IN SITUATIONS WHERE THERE IS NO AVAILABLE SERVICE CENTRE.



MOBILE GREASE UNITS FOR 12.5, 18 AND 20 kg PAILS WITH PUMPMASTER 3 PUMP

424 172.030

424 152

424 172







PUMP MASTER 3 MOBILE AIR OPERATED GREASERS

424 172.030 PM3 air operated greaser with drum trolley with base, for 20 kg pails

Includes:

- 404 100: Pump Master 3 55:1 pressure ratio grease pump, h=410 mm with bung adaptor.
- 418 002: 330 mm drum cover for 20 kg grease containers.
- 741 602: Carrying handle
- 412 102: 2 m x 1/4" high pressure grease hose.
- 413 080: High pressure grease control gun with z swivel.
- 431 001: Two wheel trolley with base.

424 170.030 PM3 air operated greaser with drum trolley with base for 12.5 to 18 kg pails $\frac{1}{2}$

As model 424 172.030, but includes 310 mm drum cover (PN 418 013) instead of 330 mm drum cover (PN 418 002).

424 152 PM3 air operated greaser with drum cart, for 20 kg pails

As model 424 170.030, but includes two wheel cart (PN 430 000) instead of trolley with base (PN 431 001).

424 150 PM3 air operated greaser with drum cart, for 12.5 to 18 kg pails

As model 424 172.030, but includes 310 mm drum cover (PN 418 013) instead of 330 mm drum cover (PN 418 002) and includes two wheel cart (PN 430 000) instead of trolley with base (PN 431 001).

PUMP MASTER 3 PORTABLE AIR OPERATED GREASERS

424 172 PM3 air operated greaser, for 20 kg pails

Includes:

- 404 100: Pump Master 3 55:1 pressure ratio grease pump, h=410 mm with bung adaptor.
- 418 002: 330 mm drum cover for 20 kg grease containers.
- 741 602: Carrying handle.
- 412 102: 2 m x 1/4" high pressure grease
- 413 080: High pressure grease control gun with z-swivel.

424 170 PM3 air operated greaser, for 12.5 to 18 kg pails

As model 424 172, but includes 310 mm drum cover (PN 418 013) instead of 330 mm drum cover (PN 418 002).

Not included options:

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

417 005: Follower plate 340 - 300 mm. For 20 kg pails.

411 100: In-line grease meter for grease control gun.



425 290 425150





PUMP MASTER 3 PORTABLE AIR OPERATED GREASER

425 290 PM3 air operated greaser, for 50 kg drums

Includes:

- 407 200: Pump Master 3 55:1 pressure ratio grease pump, h=720 mm with bung adaptor.
- 418 004: 405 mm drum cover for 50 kg grease drums.
- 412 102: 2 m x 1/4" high pressure grease
- 413 080: High pressure grease control gun with z-swivel.
- 430 000: Two wheel cart.



Follower plate is an option.

PUMPMASTER 3 MOBILE AIR OPERATED GREASER

425 150 PM3 air operated greaser with drum trolley with base, for 50 kg drums

Includes:

- 407 200: Pump Master 3 55:1 pressure ratio grease pump, h=725 mm with bung adaptor.
- 418 004: 405 mm drum cover for 50 kg grease drums.
- 412 103: 3 m x 1/4" high pressure grease hose.
- 413 080: High pressure grease control gun with z- swivel.
- 431 000: Four wheel trolley with base.

425 150.006 PM3 air operated greaser with drum trolley with base for 50 kg drums Same as model 425 150 but with 6 m grease hose instead of 3 m.

Not included options:

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

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

411 100: In line grease meter for grease control gun.



MOBILE GREASE UNITS FOR 180 kg DRUMS WITH PUMPMASTER 3 PUMPS

428 243

428 200





PUMPMASTER 3 MOBILE AIR OPERATED GREASER - 180 kg

428 243 PM3 mobile air operated greaser, for 180 kg drums

Includes:

- 409 200: PumpMaster 3 55:1 pressure ratio grease pump, h= 920 mm with bung adaptor.
- 418 006: 610 mm drum cover for 180 kg drums.
- 417 004: 590 550 mm follower plate for 180 kg drums.
- 412 104: 4 m x 1/4" high pressure hose.
- 413 080: High pressure grease control gun with z-swivel.
- 432 000: 180 kg drum trolley.

PUMPMASTER 3 MOBILE AIR OPERATED GREASER WITH HOSE REEL - 180 kg

428 200 PM3 mobile air operated greaser with hose reel, for 180 kg drums

Includes:

- 409 200: PumpMaster 3 55:1 pressure ratio grease pump, h= 920 mm with bung adaptor.
- 418 006: 610 mm drum cover for 180 kg drums.
- 417 004: 590 550 mm follower plate for 180 kg drums.
- 412 190: 1,5 m x 1/4" high pressure hose.
- 501 300: Open type hose reel with 10 m x 1/4" hose.
- 413 080: High pressure grease control gun with z-swivel.
- 432 814: 180 kg heavy duty drum trolley.
- 360 113: Hose reel bracket for trolley (PN 432 814).

Not included options:

411 100: In line grease meter for grease control gun.



423 150 426 243









Follower plate is an option.

PUMPMASTER 3+3 MOBILE AIR OPERATED GREASER - 50 kg

423 150 PM3+3 mobile air operated greaser, for 50 kg drum

Includes:

- 402 000: PumpMaster 3+3 60:1 pressure ratio pump grease pump, h= 730 mm with bung adaptor.
- 418 004: 405 mm drum cover for 50 kg
- 412 103: 3 m x 1/4" high pressure hose.
- 431 000: Four wheel trolley with base.
- 413 080: High pressure grease control gun with z-swivel.
- 945 591: 3/8" BSP (M)x 1/4" BSP (M) connection adapter.

PUMPMASTER 3+3 MOBILE AIR OPERATED GREASER - 180 kg

426 243 PM3+3 mobile air operated greaser, for 180 kg drum

Includes:

- 402 025: PumpMaster 3+3 60:1 grease pump, h= 925 mm with bung adaptor.
- 418 006: 610 mm drum cover for 180 kg drums.
- 417 004: 590 550 mm follower plate for 180 kg drums
- 180 kg drums.
 412 104: 4 m x 1/4" high pressure hose.
- 413 080: High pressure grease control gun with "Z" swivel.
- 432 000: 180 kg drum trolley.
- 945 591: 3/8" BSP (M) x 1/4" BSP (M) connection adapter.

PUMPMASTER 3+3 MOBILE AIR OPERATED GREASER WITH HOSE REEL

426 200 PM3+3 mobile air operated greaser with hose reel, for 180 kg drum

Includes:

- 402 025: PumpMaster 3+3 60:1 grease pump, h= 925 mm with bung adaptor.
- 418 006: 610 mm drum cover for 180 kg drums.
- 417 004: 590 550 mm follower plate for 180 kg drums.
- 412 392: 1,5 m x 3/8" high pressure hose.
- 504 301: Open type hose reel with 15 m x 3/8" hose.
- 413 080: High pressure grease control gun with "Z" swivel.
- 432 814: 180 kg drum heavy duty trolley.
- 360 113: Hose reel bracket for trolley (PN 432 814).
- 945 592: 3/8" BSP (MM) connection adapter.

Not included options:

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

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

411 100: In line grease meter for grease control gun.

Not included options:

411 100: In line grease meter for grease control gun.

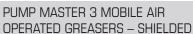


MOBILE GREASE UNITS WITH PUMPMASTER 3 AND PUMPMASTER 3+3 PUMPS

482 200

486 500





Pump Master 3 – 55:1 pressure ratio grease pump fixed on top of a protective shield. Models available for use with up to 20 kg and 50 kg drums placed inside the shield.

482 200 PM3 mobile air operated greaser shielded, for up to pails 20 kg

Includes:

- 404 100: Pump Master 3 55:1 pressure ratio grease pump.
- 480 021: Protective cabinet with 4 castors.
- 412 102: 2 m x 1/4" high pressure hose.
- 413 080: Grease control gun with "Z" swivel.

482 500 PM3 mobile air operated greaser shielded, for 50 kg drums

Similar to model 482 200, but for 50 kg drums. Includes PM3 – 55:1 pressure ratio grease pump, (PN 407 200), protective cabinet with two wheels, two castors and handle, for 50 kg drum (480 050) and 3 m x 1/4" high pressure grease hose (PN 412 103).



PUMP MASTER 3+3 MOBILE AIR OPERATED GREASERS - SHIELDED

Pump Master 3+3-60:1 pressure ratio grease pump fixed on top of a protective shield. Models available for use with up to 20 kg and 50 kg drums placed inside the shield.

486 200 PM3+3 mobile air operated greaser shielded, for up to 20 kg pails

Includes:

- 402 050: Pump Master 3+3 60:1 pressure ratio grease pump.
- 480 021: Protective cabinet with 4 castors.
- 412 102: 2 m x 1/4" high pressure hose
- 413 080: Grease control gun with "Z" swivel.
- 945 591: 3/8" BSP(M) x 1/4" BSP(F) connection adapter.

486 500 PM3+3 mobile air operated greaser shielded, for 50 kg drums

Similar to model 486 200, for 50 kg drums. Includes PM3+3 - 60:1 pressure ratio grease pump (PN 402 000), protective cabinet with two wheels, two castors and handle, for 50 kg drum (480 050) and 3 m x 1/4" high pressure grease hose (PN 412 103).

Not included options

417 001: Follower plate Ø 290 – 260 mm for 12.5 to 18 kg pails.

417 005: Follower plate Ø 330 – 300 mm for 20 kg pails.

417 002: Follower plate Ø 370 – 330 mm for 50 kg large diameter drums.

417 003: Follower plate \emptyset 390 – 360 mm for 50 kg stardard diameter drums.

411 100: In-line grease meter for control gun.

MOBILE EXTRUSION UNIT FOR 12 - 20 kg PAILS

424 060

Mobile unit specially designed for use with hard to pump sticky grease, high viscosity grease (NLGI 3) and sealant.

The pump's lower end is attached to an inductor plate and the pump is mounted to a pneumatic piston that elevates the pump for replacing an empty drum. The pneumatic piston also acts when the pump is in use, pushing the pump and forcing it into the grease container, aiding the pump prime. This makes possible to pump very high viscosity fluids.

It can be used with 12 to 20 kg pails, minimum internal diameter 260 mm, maximum internal diameter 298 mm) with a maximum height of 370 mm.

The unit includes a 60:1 pressure ratio PumpMaster 3+3 grease pump and it is mounted on a rolling base with 4 wheels, two of them with brake. The pump includes 3 m high pressure hose and a grease control gun with z- swivel and hydraulic connector (PN 413 080).

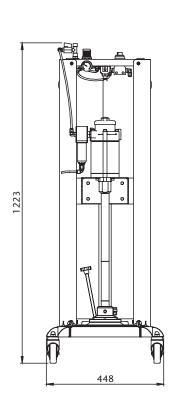
The air cylinder is controlled with a valve located on the top of the inductor post and includes a pressure regulator to adjust the downward pressure.

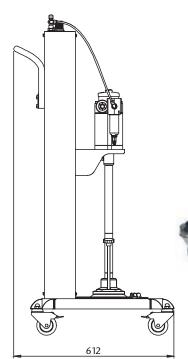
424 060 Mobile extrusion unit

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

424 061 Mobile extrusion unit

As 424 060, but without delivery hose and control gun and nozzle.







Air filter and regulator (PN 240 500) is non-included option.



SELF CONTAINED OIL DISPENSERS, 25 LITRES

324 000

325 000

327 020







PRESSURIZED LUBRICANT DISPENSERS 25 LITRES

324 010 Pressurized lubricant dispenser, with meter, 25 litres

Mobile unit for dispensing viscous lubricants, with 25 I (6.6 US gallon) steel container and level gauge. The unit must be pressurized using a tyre inflator (max pressure 7 bar - 100 psi, safety valve included). Supplied with a 1.5 m delivery hose and oil control gun, digital elecctronic hose end meter, with flexible outlet and manual non-drip nozzle.

324 000 Pressurized lubricant dispenser, 25 litres

As model 324 010, but without meter.

HAND OPERATED LUBRICANT DISPENSERS 25 LITRES

325 010 Hand operated lubricant dispenser with meter, 25 litres

Self contained unit with a 25 I (6.6 US gallon) container with level gauge. Unit includes a lever action pump, digital electronic oil meter at the pump outlet and 1.5 m delivery hose with valve and 135° angled nozzle.

325 000 Hand operated lubricant dispenser, 25 litres

A model 325 010, but without meter.

AIR OPERATED LUBRICANT DISPENSERS 25 LITRES

327 020 Air operated lubricant dispenser with meter, 25 litres

Self contained unit with a 25 I (6.6 US gallon) container with level gauge. Unit includes an air operated 2:1 pressure ratio pump, specially designed for dispensing high viscosity lubricants. Oil meter with digital electronic meter at the pump outlet and 1.5 m delivery hose with oil control gun with 110° angled outlet with manual non drip nozzle.

SELF CONTAINED OIL DISPENSERS 70 LITRES AND MOBILE UNITS FOR 50 LITRES DRUMS



326 000 328 010 370 400







HAND OPERATED LUBRICANT DISPENSERS 70 LITRES

326 010 Hand operated lubricant dispenser with meter, 70 litres

Self contained unit with a 70 I (17 US gallon) container with level gauge. Unit includes a lever action pump, oil meter with digital electronic meter at the pump outlet and 1,5 m delivery hose with valve and 135° angled nozzle.

326 000 Hand operated lubricant dispenser, 70 litres

Same as model 326 010, but without meter.

328 010 Air operated lubricant dispenser with meter, 70 litres

Self contained unit with a 70 I (17 gallons) container with level gauge. Unit includes an air operated 3:1 pressure ratio pump for dispensing all types of lubricants, 3 m delivery hose and hose end meter with semi automatic non drip nozzle.

MOBILE OIL DISPENSERS FOR 50 LITRE DRUMS

370 400 Mobile oil dispenser for 50 litre drums with hose end meter

Includes:

- 358 120: 3:1 pressure ratio oil pump.
- 418 010: 405 mm drum cover with two bung openings.
- 362 103: 3 m oil hose.
- 431 000: 4 wheeled drum trolley for 50 litre (13.16 US gallon) drums.
- 365 603: Hose end meter.

370 500 Mobile oil dispenser for 50 litre drums

Same as model 363 081 but without meter.



MOBILE UNITS OIL DISPENSERS FOR 200 LITRE DRUMS

376 300

376 610

378 110







MOBILE OIL DISPENSERS FOR 200 LITRE DRUMS WITH LONG PUMP

376 300 Mobile oil dispensers for 200 litre drums

Includes:

- 354 120: 3:1 pressure ratio oil pump for 200 l drums.
- 362 103: 3 m x 1/2" oil hose.
- 365 603: Hose end meter with semi automatic non drip nozzle.
- 432 000: 200 I drum trolley.

MOBILE OIL DISPENSERS FOR 200 LITRE DRUMS

376 610 Mobile oil dispensers for 200 litre drums

The pump mounted on the trolley makes replacing empty drums easier.

Includes:

- 353 120: 3:1 pressure ratio oil pump.
- 360 102: Wall pump bracket.
- 367 011: Suction hose for 200 I drums.
- 362 103: 3 m x 1/2" oil hose .
- 365 603: Hose end meter with semi automatic non drip nozzle.
- 432 814: 200 I drum heavy duty trolley.

MOBILE OIL DISPENSERS FOR 200 LITRE DRUMS WITH HOSE REEL

378 110 Mobile oil dispensers for 200 litre drums with hose reel

The pump mounted on the trolley makes replacing empty drums easier.

Includes:

- 353 120: 3:1 pressure ratio oil pump.
- 360 102: Wall pump bracket.
- 367 011: Suction hose for 200 I drums.
- 502 204: 8 m x 1/2" enclosed hose reel.
- 360 113: Hose reel bracket for trolleys.
- 365 603: Hose end meter with semi automatic non drip nozzle.
- 432 814: 200 I drum heavy duty trolley.



557 011 376 750





557 011 Mobile metered fluid dispenser with diaphragm pump for 200 litre drums

Mobile unit for dispensing antifreeze and windshield wash fluids and solutions using a DirectFlo DF50 air operated diaphragm pump with Delrin wetted parts and balls and Hytrel diaphragms. For use with antifreeze, transmission fluid, windshield wash and solvents.

Includes:

- 552 016: DF50 diaphragm pump with Delrin wetted parts and balls and Hytrel diaphragms.
- 367 011: Suction hose for drums.
- 362 103: 3 m x 1/2" delivery hose.
- 360 100: Pump bracket.
- 365 675: Hose end meter.
- 432 000: 200 I drum trolley.
- 360 134: Pump bracket.
- 367 011: Suction hose for 200 I drum.
- 945 554: 3/4"-1/2" BSP (MM) connection adaptor.

557 012 Mobile dispenser with diaphragm pump for 200 litre drums

As model 557 011, but includes non-metered fluid gun (PN 186 300) instead of hose end meter (PN 365 675).



MOBILE DISPENSERS WITH PISTON PLIMP

376 750 Mobile metered fluid dispenser with piston pump for 200 litre drums

Mobile unit for dispensing solutions using a nickel coated 1:1 pressure ratio piston pump mounted on top of a 200 l drum.

Includes:

- 601 202: Pump Master 2 nickel coated pump, 1:1 pressure ratio.
- 733 218: PVC suction tube.
- 945 554: M 3/4" x M 1/2" connection adaptor.
- 362 103: 3 m x 1/2" delivery hose.
- 365 603: Hose end meter.
- 432 000: 200 I drum trolley.
- 360 134: pump bracket.

376 751 Mobile dispenser with piston pump for 200 l drums

As model 376 750, but includes non-metered fluid gun (PN 186 300) instead of hose end meter (PN 365 603).





432 000



432 814



TROLLEY FOR 50 KG (120 LB) DRUMS

431 000 Trolley for 50 and 20 kg drumsFour wheeled trolley with tubular frame for 50 and 20 kg drums. The drum is fixed to the trolley with two height adjustable hooks.

431 001 Trolley for 50 and 20 kg drums Same as model 431 000, but with two rubber pads instead of the two front wheels.

TROLLEY FOR 185 KG (440 LB) DRUMS

432 000, 185 kg drum heavy duty trolley Trolley with two solid rubber wheels and one rubber swivelling wheel with brake.

A hose reel or a pump can be mounted using optional brackets.

360 134 Pump bracket

For trolley 432 000. Requires wall bracket 306 102 for fixing an air operated pump.

360 135 Hose reel bracket For trolley 432 000.

HEAVY DUTY TROLLEY FOR 185 KG (440 LB) DRUMS

432 814, 185 kg drum heavy duty trolley Heavy duty trolley with two Ø 260 mm tyred wheels and one solid rubber swivelling wheel with brake. Includes an adjustable chain for securing the drum and a bracket mounted on the handle for fixing an air operated pump (requires bracket 360 102). A hose reel can also be mounted using optional bracket (360 113).

360 113 Hose reel bracket For trolley 432 814.

430 000



485 120



480 021



TROLLEY FOR 20 KG (44 LB) PAILS

430 000 Trolley for 20 kg pails

Two wheeled trolley with tubular frame for 50 and 20 kg drums. The drum is fixed to the trolley with one height adjustable hook.

DRUM DOLLIES

485 120 Adjustable drum dolly, 205 litres

Dolly for drums with diameter \emptyset 400 - 600 mm, with three adjustable drum clamps and three swivelling castors (\emptyset 75 mm), one of them with brake.

485 000 Drum dolly 60 litres

Dolly for 60 litres drums, with three adjustable drum clamps and four swivelling castors (Ø 60 mm).

MOBILE PROTECTIVE DRUM CABINETS

480 050 Mobile protective drum cabinet, 50 litres

480 021 Mobile protective drum cabinet, 20 litres

STATIONARY PUMP PACKAGES GREASE AND OIL

PUMPMASTER 3 GREASE PUMP PACKAGES	84
PUMPMASTER 3+3 GREASE PUMP PACKAGES	85
PUMPMASTER 2 / 1:1 PRESSURE RATIO PUMP PACKAGES	86
PUMPMASTER 2 / 3:1 PRESSURE RATIO PUMP PACKAGES	87
LUBRICATION BENCHES	90
FIELD SERVICE UNITS	91









PUMP MASTER 3/55:1 PACKAGE

428 262 PumpMaster 3/55:1 pressure ratio pump package 185 kg drums

Package for high pressure greasing with a PumpMaster 3/55:1 pressure ratio pump for 185 kg drums.

Includes:

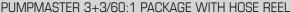
- 409 200: PumpMaster 3/55:1 grease pump, h= 920 mm with bung adaptor.
- 418 006: 610 mm drum cover for 180 kg drums.
- 417 004: 590 550 mm follower plate for 180 kg drums.
- 412 104: 4 m x Ø 1/4" high pressure hose.
- 413 080: High pressure grease control gun with z-swivel.
- 360 125: Grease control gun holder.

- 239 000: 1/4" BSP (MM) connection adaptor.
- 240 500: Air filter and pressure regulator, 0-12 bar, 1/4" BSP (FF).
- 411 100: In line grease meter for grease control gun.



426 262





$453\ 603\ PumpMaster\ 3+3/60:1$ pressure ratio pump package with 15 m hose reel, 185 kg drums

Assembly for high pressure greasing with a PumpMaster 3+3 - 55:1 pressure ratio pump for 185 kg drums. Package includes a 3/8" hose reel for higher delivery.

Includes:

- 429 800: PumpMaster 3+3/60:1 grease pump kit for 185 kg drums.
- 506 321: Open type single arm reel with 15 m x 3/8" hose.
- 413 080: High pressure grease control gun with z-swivel.

453 602 PumpMaster 3+3/60:1 pressure ratio pump package with 15 m hose reel, 185 kg drums

Same as above, with double pedestal arm reel with $15 \text{ m} \times 3/8$ " hose (PN 504 301) instead of reel (PN 506 321).



PUMPMASTER 3+3/60:1 PACKAGE

426 262 PumpMaster 3+3/60:1 pressure ratio pump package, 185 kg drums

Assembly for high pressure greasing with a PumpMaster 3+3/55:1 pressure ratio pump for 185 kg drums.

Includes:

- 402 025: PumpMaster 3+3/60:1 grease pump, h= 920 mm. with bung adaptor.
- 418 006: 610 mm drum cover for 180 kg drums.
- 417 004: 590 550 mm follower plate for 180 kg drums.
- 412 104: 4 m x 1/4" high pressure hose.
- 413 080: High pressure grease control gun with z-swivel.
- 360 125: Grease control gun holder.
- 945 591: M 3/8" BSP (M) 1/4" BSP (M) connection adaptor.

- 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.
- 411 100: In line grease meter for grease control handle.



PUMPMASTER 2/1:1 PRESSURE RATIO PUMP PACKAGES

PM2 1:1 PRESSURE RATIO PUMP PACKAGES FOR 205 LITRE DRUMS

Packages with high speed air operated low pressure transfer pump. The pump is designed to fit the 2" bung opening hole on 50 and 205 I oil drums or to be mounted on a lid for open drums.

1:1 ratio pumps are used for a clean and efficient transfer of lubricants, from their original drum to miscellaneous portable grease and oil pumps, loader buckets, auxiliary tanks, etc., without the risk of lubricant contamination.

This pump can easily be transferred from one drum to another. An adjustable adapter fits any drum or drum cover with a 2" BSP bung opening. Pump weight is only 4.8 kg.

An air valve or an optional pressure regulator allows the user to adjust the lubricant flow rate. This is useful when filling open buckets to prevent splashing or to avoid overflow when reaching the top of a container.

454 002

454003

454 010

454 009









PART No.	DESCRIPTION	PUMP	HOSE	DELIVERY GUN	AIR INLET ACCESSORY	APPLICATION	APPROX. DELIVERY
454 002	1:1 high volume transfer package	352 120	3 m x 3/4" 362 303	High delivery nozzle 361 000	Needle air valve 950 302	205 I drums	30 l/min (1)
454 003	1:1 transfer package	352 120	3 m x 1/2" 362 103	Oil control gun 363 078	-	205 I drums	15 l/min (1)
454 010	1:1 transfer package, metered	352 120	3 m x 1/2" 362 103	Hose end meter 365 603	-	205 I drums	10 l/min (1)
454 009 (3)	1:1 grease transfer package	352 120	3 m x 3/4" 362 303	Ball valve with angled nozzle	Needle air valve 950 302	185 kg drums	3.2 kg/min (2)

⁽¹⁾ Delivery with SAE30 oil at 7 bar inlet pressure and 20 °C temperature.

- 239 000: 1/4" BSP (MM) connection adaptor.
- 240 200: Air pressure regulator 0 12 bar, 1/4" BSP (FF).
- 240 500: Air filter and pressure regulator, 0-12 bar, 1/4" BSP (FF).

⁽²⁾ Delivery with NLG12 grease at 7 bar inlet pressure and 20 $^{\circ}\text{C}$ temperature.

⁽³⁾ Model 454 009 includes drum cover PN 418 006 and follower plate PN 417 004 for 185 kg grease drums.



PM2 3:1 PRESSURE RATIO PUMP PACKAGES

Packages with high speed air operated medium pressure transfer pump. The pump is designed to fit the 2" bung opening hole on 50 and 205 I drums or to be mounted on a lid for open drums.

3:1 ratio pumps are used for a clean and efficient transfer and delivery of lubricants, from their original drum to miscellaneous reservoirs, engines, crank cases, gear boxes, etc. without the risk of lubricant contamination. They are recommended for transferring high viscosity lubricants or when cold weather can limit pump performance. This pump can be easily transferred from one drum to another. An adjustable adapter fits any drum or drum cover with a 2" BSP bung opening. Pump weight is only 4.2 kg.

Flow rate can be easily adjusted by regulating the air inlet flow with an optional air valve and the pressure output can be adjusted using an optional air pressure regulator.

454 150



PART No.	DESCRIPTION	PUMP	HOSE	DELIVERY GUN	APPLICATION	APPROX. DELIVERY
454 110	3:1 transfer package, metered	354 120	3 m x 1/2" 362 103	Hose end meter 365 603	205 I drums	12 l/min (1)
454 111	3:1 transfer package	354 120	3 m x 1/2" 362 103	Oil control gun 363 078	205 I drums	15 l/min (1)
454 100	Transfer pump with outlet valve 2:1 pressure ratio	352 220	None	Oil spigot valve 361 100 with tray 736 462	205 l drums	23 l/min (1)
454 150	3:1 transfer pump	353 120	6 m x 1/2" 362 306	Hose end meter 365 603	1,000 I IBC	12 l/min (1)

(1) Delivery with SAE 30 oil at 7 bar inlet pressure and 20 $^{\circ}\text{C}$ temperature.

- 239 000: 1/4" BSP (MM) connection adaptor.
- 240 200: Air pressure regulator 0 12 bar, 1/4" BSP (FF)
- 240 500: Air filter and pressure regulator, 0-12 bar, 1/4" BSP (FF).



PUMPMASTER 2/3:1 PRESSURE RATIO PUMP PACKAGES WITH HOSE REEL

454 605

454 651

454 659







DRUM MOUNTED 3:1 OIL PUMP PACKAGES WITH HOSE REEL

454 605 Drum mounted 3:1 oil pump with hose reel and hose end meter

Complete package for 200 I drums. Includes all accessories required for installation and connection to the compressed air supply.

Includes:

- 379 300: 3:1 pump kit for 200 l drums.
- 506 202: Open type single arm reel with 10 m x 1/2" hose.
- 365 603: Hose end meter with semiautomatic non drip nozzle.

454 600 Drum mounted 3:1 oil pump with hose reel and hose end meter

As above, but with double pedestal arm reel with 10 m hose (PN 501 200) instead of reel 506 202.

WALL MOUNTED 3:1 OIL PUMP PACKAGES WITH OPEN TYPE HOSE REEL

454 651 Wall mounted 3:1 oil pump with open type hose reel and hose end meterComplete package for 200 l drums. Includes all accessories required for installation and

connection to the compressed air supply.

Includes:

- 379 000: Wall mounted 3:1 pump kit for 200 l drums.
- 506 202: Open type single arm reel with 10 m x 1/2" hose.
- 365 603: Hose end meter with semiautomatic non drip nozzle.
- 360 127: Oil gun holder with drip tray.

454 653 Wall mounted 3:1 oil pump with hose reel and hose end meter

As above, but with double pedestal arm reel with 10 m hose (PN 501 200) instead of hose reel 506 202

WALL MOUNTED 3:1 OIL PUMP PACKAGES WITH ENCLOSED TYPE HOSE REEL

454 659 Wall mounted 3:1 oil pump with enclosed type hose reel and hose end meter

Complete package for 200 l drums. Includes all accessories required for installation and connection to the compressed air supply.

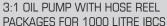
Includes:

- 379 000: Wall mounted 3:1 pump kit for 200 l drums.
- 502 204: Enclosed type hose with 10 m x 1/2" hose.
- 365 603: Hose end meter with semiautomatic non drip nozzle.
- 360 127: Oil gun holder and drip holster.

- **239 000:** 1/4" BSP (MM) connection adaptor.
- 240 200: Air pressure regulator 0 12 bar, 1/4" BSP (FF)
- 240 500: Air filter and pressure regulator, 0-12 bar, 1/4" BSP (FF).
- 360 111: Hose reel pivoting bracket.
- 360 127: Control gun holder with drip tray.







454 694, 3:1 oil pump package with hose reel for 1000 litre IBCs, top mounted

3:1 oil pump equipped with a 10 m oil hose reel and hose end meter mounted on a bracket on the top of the IBC. The package includes a suction hose to fit the IBC lower outlet.

Includes:

- 353 120: 3:1 oil pump.
- 360 106: Bracket for IBC.
- 745 306: Suction hose with adaptor for connecting to the IBC lower outlet.
- 506 202: Open type single arm reel with 10 m x 1/2" hose.
- 360 126: Hose end meter bracket for hose reels
- 360 102: Pump bracket.
- 365 603: Hose end meter.

454 695, 3:1 oil pump, hose reel and meter package for 1000 litre IBCs, top mounted

As above, but with double pedestal arm reel with 10 m hose (PN 501 200) instead of reel 506 202.



3:1 OIL PUMP WITH HOSE REEL PACKAGES FOR 1000 LITRE IBCS

454 699, 3:1 oil pump package with hose reel for 1000 litre IBCs, side mounted

3:1 oil pump equipped with a 10 m oil hose reel and hose end meter mounted on a bracket on the side of the IBC. The package includes a suction hose to fit the IBC lower outlet.

Includes:

- 353 120: 3:1 oil pump.
- 360 107: Bracket for IBC.
- 745 304: Suction hose with adaptor for connecting to the IBC lower outlet.
- 506 202: Open type single arm reel with 10 m x 1/2" hose.
- 360 126: Hose end meter bracket for hose reels.
- 360 102: Pump bracket.
- 365 603: Hose end meter.
- 360 111: Hose reel pivoting bracket.

454 697, 3:1 oil pump, hose reel and meter package for 1000 litre IBCs, side mounted

As above, but with double pedestal arm reel with 10 m hose (PN 501 200) instead of reel 506 202.

- 239 000: 1/4" BSP (MM) connection adaptor.
- 240 200: Air pressure regulator 0 12 bar, 1/4" BSP (FF)
- 240 500: Air filter and pressure regulator, 0-12 bar, 1/4" BSP (FF).

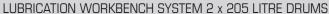


LUBRICATION BENCHES

450 000

450 010





450 000 Two drum lubrication bench

Ready to use bench, with no need of assembly as all components are factory mounted. Compact design, can store two 205 I drums. The unit can be placed in any existing service bay. Easy transportation to a new location without dismantling. It has a metal worktop to be used as a workbench. As an option, a tool cabinet with lockable shutter can be included.

The system includes two 3:1 pressure ratio air operated oil pumps, two enclosed hose reels with 10 m hose with electronic hose end meters and two air distribution hoses with quick couplers, tyre gauge and blow gun.



LUBRICATION BENCH SYSTEM 1 x 205 LITRE DRUM

450 010 One drum lubrication bench

Similar to model 450 000, but with capacity for one 205 I drum. The unit includes one 3:1 pressure ratio air operated oil pump, one enclosed hose reel with 10 m hose with electronic hose end meter and one air distribution hose with quick coupler and blow gun.

Not included options:

• 281 501: Tool cabinet for workbench (PN 450 000).

FIELD SERVICE UNITS

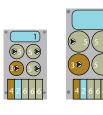


FIELD SERVICE UNITS

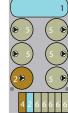
Field service units are designed and manufactured to provide efficient means of servicing large or dispersed vehicles when a return to base workshop would be costly and time consuming.

The typical use for these units is for servicing construction, mining and agricultural equipment. They are also an appreciated alternative for vehicle service in quarrying and open cast mining, power generation plants, airfield equipment and even as temporary maintenance centres for commercial or public services vehicles.

Field service units provide means of dispensing all lubricants and grease together with compressed air and, if required, other fluids. Field service units are equipped with their own independently powered gasoline engine compressor (diesel engine on demand except for model 450 200) thus enabling full workshop service routines to be carried out even in the most remote locations. Units are fully equipped with the necessary pumps, hose reels, meters, air compressor and other accessories required for operation, all securely mounted to a rugged chassis.









1 air compressor



3 air operated grease pump 4 hose reel for greas









TECHNICAL DATA AND MODELS	450 200	451 000	452 000
Dimensions (length x width x height) mm	1,800 x 965 x 1,100	2,400 x 1,300 x 1,360	3,200 x 1,600 x 1,360
Approximate weight (empty / full drums) kg	469 / 649	700 / 1420	863 / 1943
Air compressor, (gasoline engine, manual start) equivalent electric power / delivery / reservoir	3 hp / 350 l/min. / 50 l	3 hp / 350 l/min. / 300 l	5.5 hp / 570 l/min. / 300 l
Compressed air service outlets	1	1	1
Grease service outlets	1 (50 kg drums)	1 (185 kg drums)	1 (185 kg drums)
Oil service outlets	3 (50 l drums)	3 (200 l drums)	5 (200 l drums)
Crane for lifting drums	-	1	1
Tool box size (mm) (located under the hose reels)	880 x 510 x 200	500 x 600 x 200	1,260 x 510 x 200

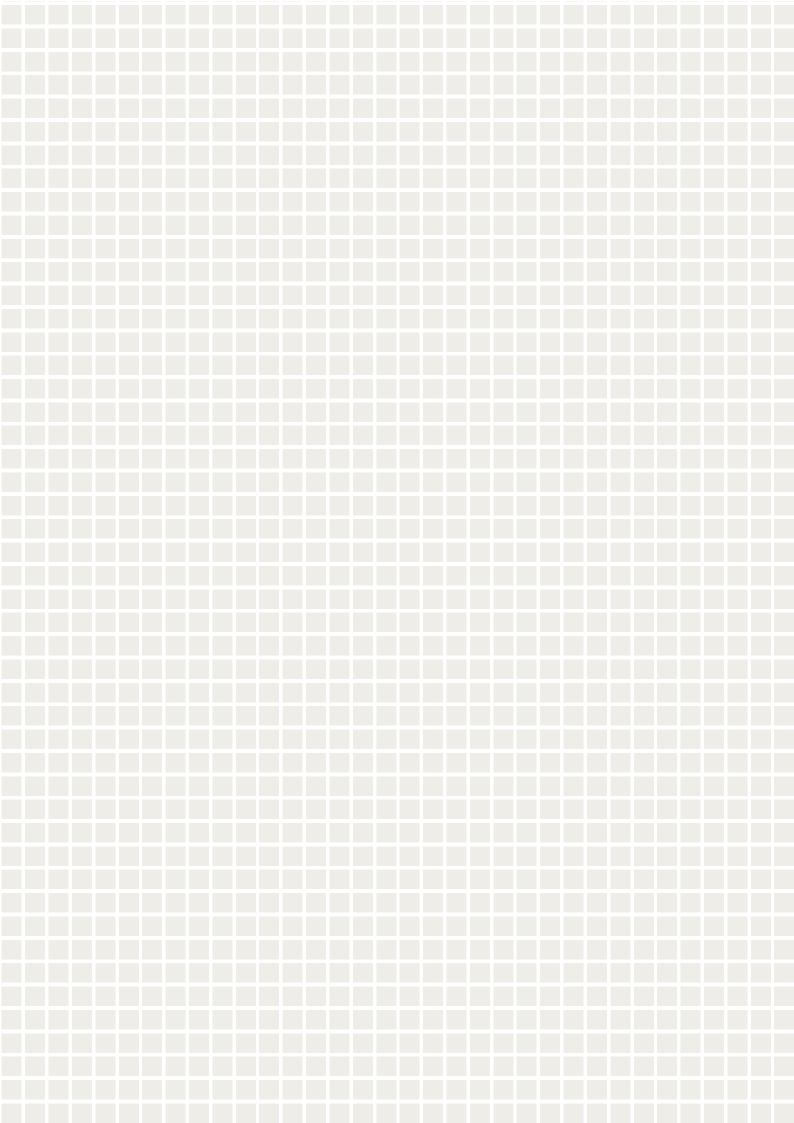
Each service unit includes:

Compressed air service outlet: One full metal double pedestal arm 15 m x 1/2" hose reel with air coupler, connector and blowgun, spray gun and tire inflator.

Grease service outlet: One full metal double pedestal arm 15 m x 3/8" hose reel, PumpMaster 3+3 - 60:1 grease pump kit, control handle and

Oil service outlet: One full metal double pedestal arm 15 m x 1/2" hose reel, digital electronic hose end meter and one PumpMaster 4 - 5:1 oil pump kit.

Alternative pumps and hose reels can be used on demand.



WASTE OIL EQUIPMENT

WASTE OIL GRAVITY RECEIVERS, 100 LITRES	94
WASTE OIL GRAVITY RECEIVERS, 70 LITRES	95
WASTE OIL SUCTION UNITS, 100 LITRES	96
WASTE OIL SUCTION UNITS, 24 LITRES AND 70 LITRES	97
COMBINED WASTE OIL SUCTION AND GRAVITY UNITS, 100 LITRES	98
COMBINED WASTE OIL SUCTION AND GRAVITY UNITS, 70 LITRES	99
SPECIAL WASTE OIL AND COOLANT AND COOLANT GRAVITY RECEIVERS	100
WASTE OIL EVACUATION PUMP KIT AND ACCESSORIES	101
EVACUMASTER WASTE OIL SUCTION UNIT	102
AUTOVAC WASTE OIL SUCTION SYSTEM	103
WASTE OIL EQUIPMENT ACCESSORIES	104
EVACUMASTER AND AUTOVAC ACCESSORIES	105







372 400





372 200 Mobile waste oil receiver 100 litres, pump discharge

The unit is discharged with a 1:1 pressure ratio pump, located at the back of the unit, through a 1.5 m discharge hose with a dry break quick coupler.

372 300 Mobile waste oil receiver 100 litres, remote pump discharge

The unit is discharged with a wall mounted discharge pump kit (PN 559 100, not included) through a hydraulic dry break coupler located at the bottom of the tank. Includes hydraulic coupler (PN 950 352).



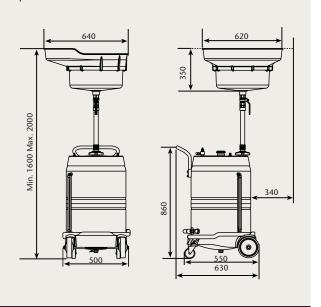
MOBILE WASTE OIL RECEIVER 100 L CAPACITY. PRESSURE DISCHARGE

372 400 Mobile waste oil receiver 100 litres pressure discharge

The unit is discharged through a discharge hose pressurizing the unit at 0.5 bar (3.5 psi) by using a tyre inflator. The unit includes a safety valve, that prevents overpressure, and a 1.5 m discharge hose.

Mobile units for gravity collection of motor oil and gear oil as well as other non-aggressive A-III class automotive fluids. Receivers can be used under vehicle lifts and inside lubrication pits.

- 100 litres (26 US gallon) capacity, with side level gauge.
- Large tray for tools, washers, filters, etc. on top of the tank.
- One piece molded spoiler for securing the discharge hose in pressure discharge models.
- Two reinforced casters and two reinforced wheels.
- Composite and steel telescopic collection bowl, with 360° positionable oversized extension for wider reach. Anti-splash grid that can hold used filters for draining.
- Steel tank and collection bowl with epoxy powder coating.





373 400





MOBILE WASTE OIL RECEIVER 70 LITRES CAPACITY. PUMP DISCHARGE

373 200 Mobile waste oil receiver 70 litres pump discharge

The unit is discharged with a 1:1 pressure ratio pump, located at the back of the unit, through a 1.5 m discharge hose with a dry break quick coupler.

373 300 Mobile waste oil receiver 70 litres remote pump discharge

The unit is discharged with a wall mounted discharge pump kit (PN 559 100 not included) through a hydraulic dry break coupler located at the bottom of the tank. Includes hydraulic coupler (PN 950 352).

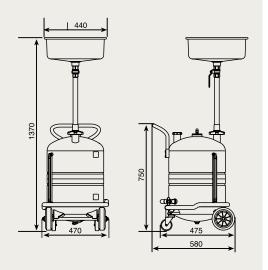
MOBILE WASTE OIL RECEIVER 70 L CAPACITY. PRESSURE DISCHARGE

373 400 Mobile waste oil receiver 70 litres pressure discharge

The unit is discharged through a discharge hose pressurizing the unit at 0.5 bar (3.5 psi) with a tyre inflator. The unit includes a safety valve, that prevents overpressure, and a 1.5 m discharge hose.

Mobile units for gravity collection of motor oil and gear oil as well as other non-aggressive A-III class automotive fluids. Receivers can be used under vehicle lifts.

- 70 litres (17 gallons) capacity, with side level gauge.
- Two reinforced casters and two reinforced wheels.
- Cylindrical telescopic collection bowl with strainer.
- Steel tank and collection bowl with epoxy powder coating.





WASTE OIL SUCTION UNITS, 100 LITRES

372 100

372 600



MOBILE WASTE OIL SUCTION UNIT WITH TRANSPARENT CHAMBER 100 L

372 100 Mobile waste oil suction unit, 100 litres with transparent chamber

Includes a 10 litres transparent chamber that can be used as vacuum reservoir and allows an immediate inspection of the extracted waste oil.



MOBILE WASTE OIL SUCTION UNIT 100 LITRES

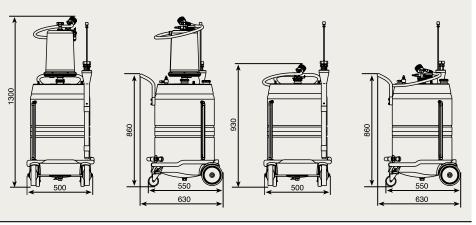
372 600 Mobile waste oil suction unit, 100 litres

Mobile waste oil suction unit, 100 I capacity. Ideal use with all types of passenger cars, trucks, tractors, aircrafts, boats, etc.

Mobile units for waste oil suction. Waste oil suction is carried out by an air operated vacuum pump with no moving and no wear parts, using a suction cane or adapter inserted into the motor oil dip-stick tube. All units include a 2 m suction hose with rubber handle and a set of adapters, suction canes and holder (PN 737 972).

Once the vacuum inside their tank is created, then these units can be used as autonomous units, disconnected from the air supply. The units are discharged through a 1.5 m discharge hose, pressurizing the unit at 0.5 bar (3.5 psi) with a tyre inflator. These units include a safety valve that prevents overpressure.

- 100 litres (26 US gallon) capacity, with side level gauge.
- Large tray for tools, washers, filters, etc. on top of the tank, with special holders for suction connectors.
- One piece moulded spoiler for securing the discharge hose.
- Two reinforced castors and two reinforced wheels.
- High performance and low noise vacuum pump.
- Complete suction canes and adapters kit with holder. Holder can be removed to clean it.
- Steel tank with epoxy powder coating.





371 600 373 100







MOBILE WASTE OIL SUCTION UNITS 70 LITRES AND 24 LITRES CAPACITY

373 600 Mobile waste oil suction unit, 70 litres

Mobile waste oil suction unit, 70 I capacity. Ideal for use with all types of passenger cars, trucks, tractors, aircrafts, boats, etc.

371 600 Mobile waste oil suction unit, 24 litres

Mobile waste oil suction unit, 24 l capacity. Ideal for use with cars, tractors, boats, etc. Gravity discharged by removing the cap on top of the unit.

MOBILE WASTE OIL SUCTION UNIT 70 LITRES CAPACITY

373 100 Mobile waste oil suction unit with transparent chamber, 70 litres Includes a 10 litres transparent chamber the

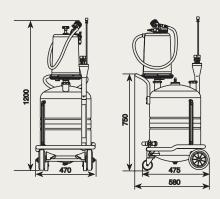
Includes a 10 litres transparent chamber that can be used as a vacuum reservoir and allows an immediate inspection of the extracted waste oil.

Mobile units for waste oil suction. Waste oil suction is carried out by an air operated vacuum pump with no moving and no wear parts, using a suction cane or adapter inserted into the motor oil dip-stick tube. All units include a 2.0 m suction hose with rubber handle and a set of adapters, suction canes and holder 737 972.

Once the vacuum inside their tank is created, then these units can be used as autonomous units, disconnected from the air supply. Model 371 600 is gravity discharged by removing the cap on top of the unit.

Models 371 100 and 373 600 are discharged through a 1.5 m discharge hose pressurizing them at 0.5 bar with a tyre inflator. These units include a safety valve that prevents overpressure.

- 70 litres (17 US gallon) capacity, with side level gauge.
- Two reinforced casters and two reinforced wheels.
- High performance and low noise vacuum pump.
- Complete suction canes and adapters kit with holder. Holder can be removed to clean it.
- Steel tank with epoxy powder coating.





COMBINED WASTE OIL SUCTION AND GRAVITY UNITS, 100 LITRES

372 500

372 000





COMBINED WASTE OIL SUCTION AND GRAVITY UNIT, 100 LITRES

372 500 Combined waste oil suction and gravity unit, 100 litres

Mobile waste oil suction unit, 100 l capacity. Ideal use with all type of passenger cars, trucks, tractors, etc.

COMBINED WASTE OIL SUCTION AND GRAVITY UNIT, WITH TRANSPARENT CHAMBER, 100 LITRES

372 000 Combined waste oil suction and gravity unit with transparent chamber, 100 litres

Includes a 10 litres transparent chamber that can be used as a vacuum reservoir and allows an immediate inspection of the extracted waste oil.

Mobile units that allow the collection of waste oil by gravity and by suction.

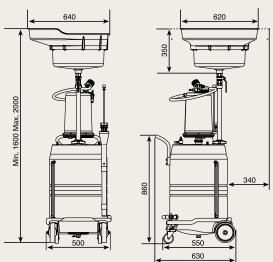
Waste oil suction is carried out by an air operated vacuum pump with no moving and no wear parts, using a suction cane or adapter inserted into the motor oil dip-stick tube. All units include a 2.0 m suction hose with rubber handle and a set of adapters and suction canes with holder (PN 737 972)

Gravity collection is carried out using a 20 litres capacity, height adjustable and oversized, collection bowl with an anti-splash grid.

Once the vacuum inside their tank is created, then these units can be used as autonomous units, disconnected from the air supply.

The units are discharged through a discharge hose, pressurizing the unit at 0.5 bar (3.5 psi) with a tyre inflator. These units include a safety valve that prevents overpressure.

- 100 litres (26 gallons) capacity, with side level gauge.
- Large tray for tools, washers, filters, etc. on top of the tank, with special holders for suction connectors.
- High performance and low noise vacuum pump.
- One piece moulded spoiler for securing the discharge hose.
- Two reinforced casters and two reinforced wheels.
- Composite and steel telescopic collection bowl, 360° positionable oversized extension for wider reach. Anti-splash grid that can hold used filters for draining.
- Complete suction canes and adapters kit with holder. Holder can be removed for cleaning.
- Steel tank with epoxy powder coating.





373 000 373 500





373 000 Combined waste oil suction unit and gravity unit with transparent chamber, 70 litres

Includes a 10 litres transparent chamber that can be used as a vacuum reservoir and allows an immediate inspection of the extracted waste oil.



COMBINED WASTE OIL SUCTION AND GRAVITY UNIT, 70 LITRES CAPACITY

373 500 Combined waste oil suction and gravity unit, 70 litres

Mobile waste oil suction unit, 100 litres capacity. Ideal use with all types of passenger cars, trucks, tractors, etc.

Mobile units that allow the collection of waste oil by gravity and by suction.

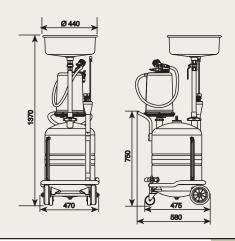
Waste oil suction is carried out by an air operated vacuum pump with no moving and no wear parts, using a suction cane or adapter inserted into the motor oil dip-stick total. All units include a 2.0 m suction hose with rubber handle and a set of connectors and canes with holder (PN 737 972).

Gravity collection is carried out using a 20 I capacity, telescopic collection bowl with strainer.

Once the vacuum inside their tank is created, then these units can be used as autonomous units, disconnected from the air supply,

The units are discharged through a 1.5 m discharge hose, pressurizing the unit at 0.5 bar (3.5 psi) with a tire inflator. The units include a safety valve that prevents overpressure.

- 70 litres (17 gallons) capacity, with side level gauge.
- High performance and low noise vacuum pump.
- Two reinforced casters and two reinforced wheels.
- Cylindrical telescopic collection bowl with grid.
- \bullet Complete suction canes and connectors kit with holder. Holder can be removed to clean it.
- Steel tank with epoxy powder coating.





SPECIAL WASTE OIL AND COOLANT GRAVITY RECEIVERS

439 100

PIT ROLLING DRAINER



439 100 Pit rolling drainer, 95 Litres

Rolling drainer for installation between pit rails with minimum / maximum width 1040 / 1450 mm. 95 I (25 US gallon) capacity. Unit includes anti-splash grid, four vertical and four horizontal rollers for easy rolling and outlet with ball valve ($1^{1/4}$ ° BSP (F). Allows the connection of a dry break hydraulic connector (PN 950 352) and connection adapters (PN 945 513 + 945 551) for discharge, once full, using a discharge pump kit (PN 559 100).

435 000

LOW LEVER MOBILE DRAINERS



Gravity discharge through a drain valve or using an evacuation pump kit (PN 559100) through a dry break hydraulic connector (PN950 352) (not included).

435 000 Low level mobile drainer, 20 litres

20 litres (5.2 US gallon) unit for use with passenger cars and small vans. Dimensions: $770 \times 470 \times 130$ mm.

436 000 Low level mobile drainer, 95 litres

95 litres (25 US gallon) unit for use with passenger cars, vans, tractors, commercial vehicles, etc. Dimensions: $1,250 \times 610 \times 260$ mm.

436 100

COOLANT FLUID RECOVERY UNIT



436 100 Coolant fluid recovery unit

95 litres low level waste oil drainer 436 000 equipped with a diaphragm pump, 1.5 m hose and control gun. The unit allows the draining of the coolant circuit of a vehicle without the use of a pit or lift. Thanks to the pump, it is possible to reuse the coolant fluid once the circuit has been repaired.

Recommended for use with industrial vehicles, construction machinery and agricultural vehicles.



WASTE OIL EVACUATION PUMP KIT

559 100

559 100 Waste oil evacuation pump kit

DF100 double diaphragm pump kit for discharging waste oil drainers through a dry break hydraulic connector. Pump kit includes wall bracket, air connection hose with quick coupler and connector, 1.5 m oil discharge hose and 1.5 m suction hose with dry break hydraulic coupling to fit connector 950 352.

379 100 Waste oil evacuation pump kit

Similar to model 559 100, includes a PumpMaster 2 / 1:1 pressure ratio poiston pump instead of 1" diaphragm pump.



WASTE OIL SUCTION CANES AND ADAPTERS

PART No.	ТҮРЕ	DIAMETER	LENGTH
737 952	Flexible	6 x 4 mm	700 mm
737 953	Flexible	8 x 6 mm	700 mm
737 954	Metallic	5 x 4 mm	700 mm
737 955	Metallic	6 x 5 mm	700 mm
737 949	Flexible	7 x 5 mm	1,000 mm
737 958	Flexible	6 x 4 mm	1,200 mm
737 959	Flexible	8 x 6 mm	1,200 mm
737 946	Flexible	8 x 6 mm	1,700 mm



All suction hoses used in Samoa equipment are fitted with a special connector to fit into Mercedes Benz vehicles. For other vehicles select from the below adapters and canes.

737 947 VAG vehicles adapter

737 948 PSA vehicles adapter

Adapters and canes kits

737 950 Suction adapters and canes kit

Includes canes PN 737 952, PN 737 953, PN 737 954, PN 737 955 and PN 737 949 and adapters PN 737 947 and PN 737 946.

737 972 Suction adapters and canes kit with holder.

Includes the same canes and connectors as kit PN 737 950 plus a cane holder.





WASTE OIL SUCTION

379 710 EVACUMASTER WASTE OIL SUCTION UNIT

Single point waste oil suction unit for collecting waste oil directly from the vehicle's engine using a suction cane or adapter inserted into the motor oil dip stick tube.

The unit is installed alongside the service bay and enables the cleanest method of waste oil collection.

An air operated piston pump, specially designed for suction applications, extracts the waste oil and transfers it to a remote storage tank.



- Air operated pump, optimised for suction.
- On/off valve, air filter with pressure regulator and adjustable timer to extend pump's life.
- Vacuum gauge for monitoring the unit's performance.
- Extra large capacity suction filter.
- 3 m long suction hose, suction canes and adapter kit with holder.

Product advantages

- Direct from the engine to the storage tank.
- No operator contact with the waste oil.
- No need for mobile equipment.
- Suction canes with quick connectors.
- Fixed installation with hose reels.
- No splashes or spills of waste oil onto the workshop floor.
- No leaking drain plugs.

Applications

Waste oil collection in maintenance facilities and workshops for:

- Cars.
- Truck and bus fleets.
- Earth moving and construction vehicles.
- Mining equipment.

379 711 Wall mounted waste oil suction unit

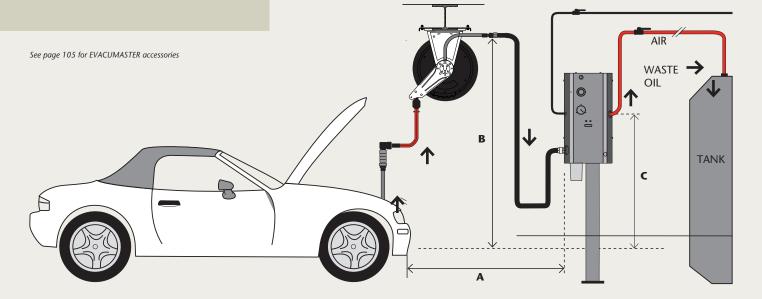
379 710 Pedestal mounted waste oil suction unit

TYPICAL INSTALLATION

For maximum efficiency, the pump should be installed as close as possible to the suction point at the same height as the engine oil sump. Installing the pump in any other position will increase the time required to extract the waste oil from the vehicle. Please observe the following maximum distances:

- **A** Maximum distance between the pump and the suction point, including the hose in the hose reel: 12 m.
- **B** Maximum suction height between the suction point and the hose reel inlet: 2.5 m
- C Maximum distance between the pump outlet and the engine oil sump level: 1.0 m.







AUTOVAC, HIGH VACUUM AUTOMATIC SUCTION SYSTEMS

393 101

High vacuum automatic unit for use in centralized waste oil suction systems in vehicle maintenance centres. The unit is easy to install and does not require any special in the field adjustments, it only requires to be connected to a compressed air supply and to a 230 V / 50 Hz power supply, to a pipe line to discharge to the waste oil storage tank and to a vacuum pipeline to the workshop suction points.

The unit includes

- Electric rotary vane vacuum pump, which achieves up to 95% vacuum. Due to the pumps high efficiency, it is possible to simultaneously use several suction points. Vacuum is distributed though the workshop by a pipeline.
- Vacuum tank, which is automatically pressurized for discharge to a waste oil storage tank when full. Once it has been discharged, the unit automatically generates the optimal vacuum conditions again.
- An electronic board, which controls the automatic operation of the unit.
- A high level sensor in the tank, which sends the signal to the board for the automatic discharge of the unit that continues until a low level sensor, also inside the tank, is activated to send the signal to regenerate the vacuum in the system.
- The system also includes a vacuum switch that stops the pump once the optimal vacuum has been created and automatically starts the vacuum pump again if it is required to build vacuum in the system. This way the vacuum pump only runs on demand and energy is saved.
- The system has the possibility of accepting a signal from a remote level sensor in the waste oil storage tank to avoid over filling it.

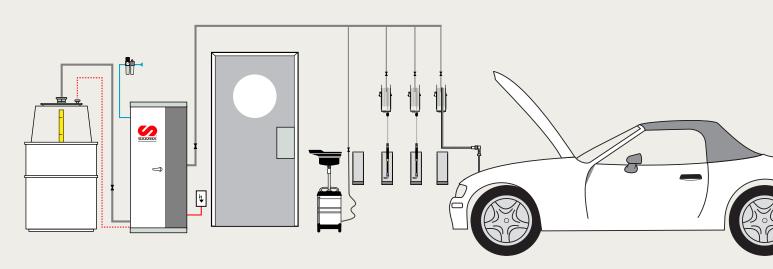
Product advantages

- Fully automatic operation.
- Direct from the engine to the storage tank.
- No personal contact with the waste oil.
- No need for mobile equipment.
- Suction canes with quick connectors.
- Fixed installation with hose reels.
- No splashes or spills of waste oil onto the workshop floor.
- No leaking drain plugs.



MODELS							
PART No.	AIR PRESSURE / ELECTRIC SUPPLY	POWER	AIR SUCTION CAPACITY	TANK CAPACITY	MAXIMUM VACUUM	DIMENSIONS (L X W X H)	WEIGHT
393 100	6 bar - 230 V/50 Hz	450 W	200 l/min	80 litres	95 %	550 x 750 x 1.350 mm	180 kg
393 101	6 bar - 230 V/50 Hz	750 W	415 l/min	430 litres	95 %	750 x 1,150 x 1,900 mm	400 kg

Model 393 100 is recommended for small and medium workshops and allows simultaneous operation of up to 3 suction points. **Model 393 101** is recommended for large workshops and for use with commercial vehicles and allows simultaneous operation of up to 6 suction points.



See page 105 for AUTOVAC accessories



WASTE OIL EQUIPMENT ACCESSORIES

372 003 - 737 967

372 002 - 373 002

743 305



WASTE OIL SUCTION MOBILE SUCTION UNIT ACCESSORIES

372 003 Transparent chamber kit

10 litres transparent chamber for 70 and 100 litres capacity mobile waste oil suction units. Complete unit with air operated vacuum pump with vacuum gauge, 2 m suction hose with rubber grip, shut-off valve and connector for Mercedes vehicles.

737 967 Suction hose kit

432 000

2 m suction hose with rubber grip, shut-off valve and connector for Mercedes vehicles.



431 000



DRUM TROLLEYS

432 000, 185 kg drum trolley

Trolley with two solid rubber wheels and one swivelling rubber wheel with brake.

431 000, 50 kg drum trolley

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



WASTE OIL RECEIVER ACCESSORIES

372 002 Collection bowl for 100 litre waste oil receiver

Collection bowl for 100 I receivers. Includes 20 litres capacity metal bowl, oversized extension, anti-splash grid, tube, shut-off valve, swivel and adapter for fixing the tube to the receivers.

373 002 Collection bowl for 70 litre waste oil receiver

Collection bowl for 70 I receivers. Includes 20 litre capacity metal bowl, tube, shut-off valve and adapter for fixing the tube to the receivers.



WASTE OIL COLLECTION BOWL

743 305, 20 litre cylindrical bowl

Ø 440 mm 20 litre capacity waste oil collection bowl. Metal construction and epoxy powder coated, includes tube and 2" bung adapter to fit on 50 and 205 litre drums.

950 352 - 950 353





ACCESSORIES FOR WASTE OIL **EVACUATION KITS**

Dry break hydraulic connector 950 352 3/4" BSP (F).

Dry break hydraulic coupler **950 353** 3/4" BSP (F).

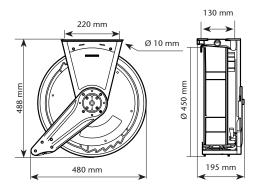
Connection adapters 945 551, 3/4" BSP (MM) 945 513, 11/4" BSP (M) - 3/4" BSP (F)

SAMOA

WASTE OIL SUCTION HOSE REEL

506 503





506 503 Waste oil suction hose reel

506 series single arm hose reel for waste oil suction, includes 6 m x 5/8" suction hose and 0.8 m x 5/8" reel inlet hose. Outlet and inlet threads: 1/2" BSP (M). For use with both, EVACUMASTER and AUTOVAC units.

737 974 Suction hose

For connection to the hose reel, 0.7 m transparent hose with rubber grip, shut-off valve and connector for canes, adapters and Mercedes Benz vehicles. Connection thread: 1/2" BSP.

743 799 Discharge hose kit

For discharging mobile waste oil receivers fitted with a hydraulic type connector. For AUTOVAC system only.

950 300

737 972



VALVE

950 300, 1/2" BSP (FF) shut off valve.

950 303, 3/4" BSP (FF) shut off valve.



SUCTION CANES & ADAPTERS KIT

737 972 Suction adaptors and canes kit with holder

The EVACUMASTER unit includes a complete suction adapters and canes kit with holder. For the AUTOVAC suction adapters and canes should be ordered separately. It is recommended to have adapters and canes kit for each suction outlet.

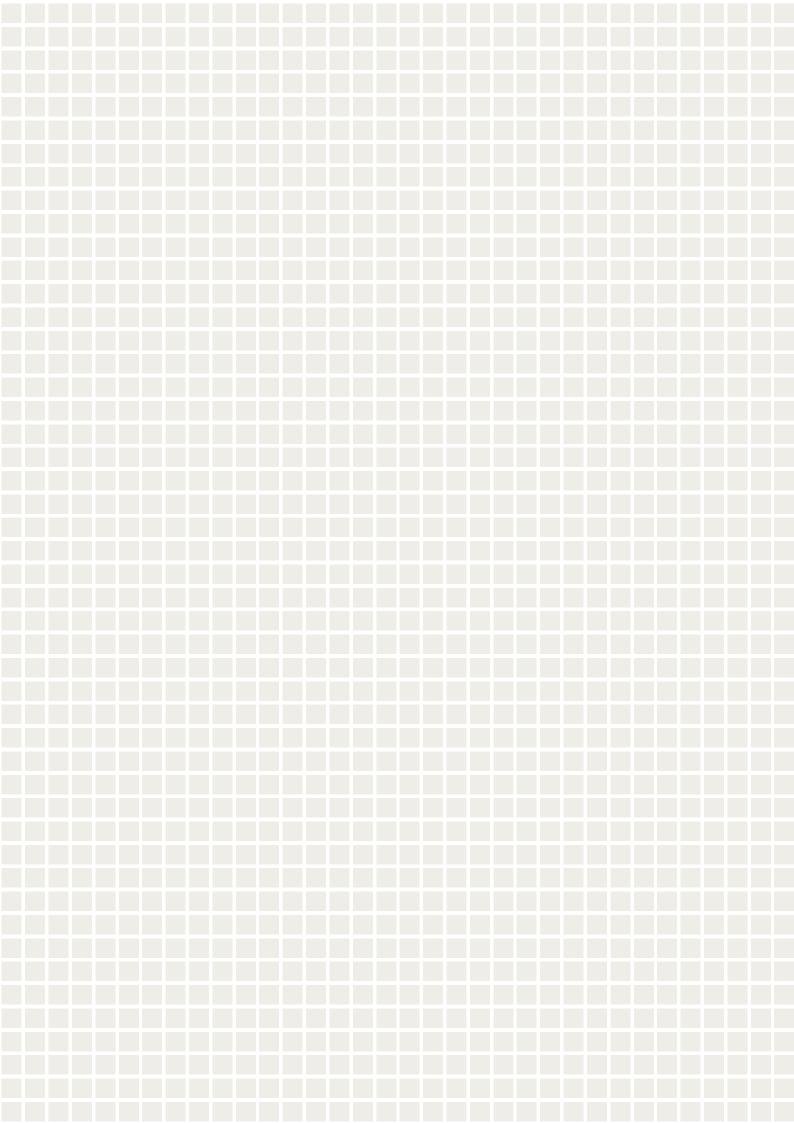
AUTOVAC CONNECTION KITS

399 304 Connection kit for AUTOVAC model 393100

Includes the hoses required to connect the AUTOVAC 393 100 to the waste oil suction and evacuation lines.

399 322 Connection kit for AUTOVAC model 393 101

Includes the hoses required to connect the AUTOVAC 393 101 to the waste oil suction and evacuation lines.



ELECTRIC PUMPS FOR OIL AND DIESEL

DC DIESEL PUMPS	 	 	 		 	. 108
AC DIESEL PUMPS	 	 	 		 	. 110
DIESEL PUMP ACCESSORIES	 	 	 		 	. 112
DC OIL PUMPS	 	 	 		 	. 113
AC OIL PUMPS	 	 	 		 	. 114
HIGH PERFORMANCE ELECTRIC OIL PUMPS	 	 	 		 	. 116
ELECTRIC OIL PLIMP PACKAGES						117







DC DIESEL PUMPS 40 LITRES / MIN

684 530

684 512 684 540

POLUX



12 AND 24 V DC DIESEL TRANSFER PUMPS, 40 LITRES / MIN

Self priming diesel transfer pumps with 12 or 24 V DC motor. Pump includes by-pass valve, built in filter (can be easily removed to clean) and carrying handle. Electric motor with IP-55 ingress protection, on/off switch and fuse. Includes 2 m cable with crocodile clamps. Inlet/outlet connection: 1" BSP (F) or flange coupling.

684 530 Diesel transfer pump. 12 V , 40 l/min

684 531 Diesel transfer pump. 24 V , 40 l/min

12 AND 24 V DC DIESEL TRANSFER PUMP KITS. 40 LITRES / MIN

12 or 24 V diesel transfer pumps equipped with 4 m x 19 mm delivery hose, aluminium delivery nozzle and 2 m cable with crocodile clamps.

684 512 Diesel transfer pump kit, 12 V, 40 l/min

684 524 Diesel transfer pump kit, 24 V, 40 l/min

12 AND 24 V DC DIESEL TRANSFER PUMPS WITH METER, 40 LITRES / MIN

12 or 24 V diesel transfer pumps equipped with a three digit meter for diesel and 2 m cable with crocodile clamps. Meter is flange coupled to the pump and includes a 90° swivelling outlet.

684 540 Diesel transfer pump with meter. 12 V , 40 l/min

684 541 Diesel transfer pump with meter. 24 V, 40 l/min

Options: (not included in PN $684\,530$ / $684\,531$, some options included in other kits as per above texts).

- **689 030:** 2 m x 25 mm suction hose with foot valve.
- 689 035: Telescopic suction tube for 200 I drums.
- 689 021: 4 m x 19 mm delivery hose. Connection threads: 1" BSP (M).
- 361 000: Aluminium delivery nozzle. 1" BSP (F).
- 688 300: Automatic delivery nozzle, 60 l/min. 1" BSP (F).
- 680 300: Volume meter for diesel. Connection threads: 1" BSP (F). 10 bar maximum working pressure.
- 689 044: 90° swivelling connection, 1" BSP (MF), to connect a delivery hose to the meter outlet.



684 451





12 AND 24 V DC DIESEL TRANSFER PUMP KITS, 60 LITRES / MIN

12 or 24 V diesel transfer pumps equipped with 4 m x \emptyset 19 mm delivery hose, automatic shut off nozzle and 2 m cable with crocodile clamps.

684 461 Diesel transfer pump kit. 12 V, 60 l/min

684 460 Diesel transfer pump kit. 24 V, 60 l/min

12 AND 24 V DC DIESEL TRANSFER PUMP, 60 LITRES / MIN

Self priming transfer pump with 12 or 24 V DC motor. Pump includes by-pass valve, built in filter (can be easily removed to clean) and carrying handle. Electric motor with IP-55 ingress protection, on/off switch and fuse. Includes 2 m cable with crocodile clamps. Inlet / outlet connection: 1" BSP (F) or flange coupling.

684 451 Diesel transfer pump. 12 V, 60 l/min

684 450 Diesel transfer pump. 24 V, 60 l/min

Options: (not included in PN 684 461 / 684 480, some options included in 684 451 / 684 450 as per above texts).

- **689 030:** 2 m x 25 mm suction hose with foot valve.
- 689 021: 4 m x 19 mm delivery hose. Connection threads: 1" BSP (M).
- **688 300:** Automatic delivery nozzle, 60 l/min. 1" BSP (F).
- 680 300: Volume meter for diesel. Connection threads: 1" BSP (F). 10 bar maximum working pressure.
- 689 044: 90° swivelling connection, 1" BSP (MF), to connect a delivery hose to the meter outlet.



AC DIESEL PUMPS 50 AND 70 LITRES / MIN

685 720

685 741

685 730





230 V AC DIESEL TRANSFER PUMPS, 50 AND 70 L/MIN

Self priming diesel transfer pumps with 230 V - 50 Hz AC motor. Pump includes by-pass valve and built in filter, which can be easily removed to clean. Electric motor with IP-55 ingress protection, on/off switch and fuse. Includes 1.8 m cable. Inlet/outlet connection: 1" BSP (F) or flange coupling.

685 720 Diesel transfer pump. 230 V - 370 W, 50 l/min

685 721 Diesel transfer pump. 230 V - 500 W, 70 l/min

230 V AC DIESEL TRANSFER PUMP KITS, 50 AND 70 L/MIN

230 V - 50 Hz AC diesel transfer pumps equipped with 4 m delivery hose, aluminium delivery nozzle and 2 m cable.

685 741 Diesel transfer pump kit. 230 V 370 W, 50 l/min

685 771 - Diesel transfer pump kit. 230 V - 500 W, 70 l/min

230 V AC DIESEL TRANSFER PUMPS WITH METER, 50 AND 70 L/MIN

230 V - 50 Hz AC diesel transfer pumps equipped with a three digit meter for diesel and 2 m cable. Meter is flange coupled to the pump and includes a 90° swivelling outlet.

Meter valid for non commercial applications only.

685 730 Diesel transfer pump with meter. 230 V - 370 W, 50 I/min

685 731 Diesel transfer pump with meter. 230 V - 500 W, 70 l/min

Options: (not included in PN 685 720 / 685 721, some options included in other kits as per above texts).

- **689 030:** 2 m x 25 mm suction hose with foot valve.
- **689 036:** 1,000/1,800 mm telescopic suction tube for tanks.
- 689 021: 4 m x 19 mm delivery hose. Connection threads: 1" BSP (M). For 50 I/min pump.
- 689 022: 4 m x 25 mm delivery hose. Connection threads: 1" BSP (M). For 70 l/min pump.
- 361 000: Aluminium delivery nozzle. 1" BSP (F).
- 688 300: Automatic delivery nozzle, 60 l/min. 1" BSP (F).
- 680 300: Volume meter for diesel. Connection threads: 1" BSP (F). 10 bar maximum working pressure.
- 689 044: 90° swivelling connection, 1" BSP (MF), to connect a delivery hose to the meter outlet.



685 716

685 715









DIESEL TRANSFER KITS WITH METER

Diesel transfer kits for 200 l drums or tanks. Kits include a 230 V - 50 Hz diesel pump with 1.8 m cable, 4 m delivery hose with aluminium nozzle and a three digit meter, flange mounted to the pump and with a 90° swivelling elbow outlet. Fluid inlet connection 1" BSP (F).

Meter valid for non commercial applications only.

685 750 Diesel transfer kit with meter. 230 V - 370 W, 50 I/min

685 751 Diesel transfer kit with meter. 230 V - 500 W, 70 l/min

WALL MOUNTED PUMP KITS

50 or 70 l/min pump mounted on a brack plate for wall or tank mounting. The unit includes a 230 V - 50 Hz diesel pump with on/off switch and 1.8 m cable, wall mounting back plate, 4 m delivery hose, aluminium nozzle and a three digit meter, flange mounted to the pump and with a 90° swivelling elbow outlet. Fluid inlet connection 1" BSP (F).

Meter valid for non commercial applications only.

685 710 Wall mounted pump kit. 230 V - 370 W, 50 l/min

685 713 Wall mounted pump kit. 230 V - 500 W, 70 l/min

685 716 Wall mounted pump kit. 230 V - 500 W, 70 I/min Includes automatic nozzle.

WALL MOUNTED PUMP CABINETS

50 or 70 l/min pump mounted in cabinet for wall or tank mounting. The unit includes a 230 V - 50 Hz diesel pump with 1.8 m cable, cabinet with nozzle holder with automatic on/off switch, 4 m delivery hose, automatic nozzle and a three digit meter, flange mounted to the pump and with a 90° swivelling elbow outlet. Fluid inlet connection 1" BSP (F).

Meter valid for non commercial applications only.

685 712 Wall mounted pump cabinet. 230 V - 370 W, 50 I/min

685 715 Wall mounted pump cabinet. 230 V - 500 W, 70 l/min

Not included options

- **689 030:** 2 m x 25 mm suction hose with foot valve.
- 689 036: 1,000/1,800 mm telescopic suction tube for tanks.
- 689 035: 1,000 mm telescopic suction tube for 200 l drums.

Not included options

- **689 031:** 4 m x 25 mm suction hose with foot valve.
- **689 037:** 2 m x 25 mm hose connecting to 1.000/1.800 mm telescopic suction tube.



680 300 - 366 726

DIESEL PUMP ACCESSORIES

361 000 - 688 001











DIESEL METERS

680 300 Diesel meter with mechanical 3 digit register, 100 l/min

Nutating-disk meter for diesel with mechanical register. Reliable, easy to install and simple to calibrate. Very low pressure drop; it can also be used for gravity fed applications. Resetable partial reading up to 999.9 litres and permanent 6 digit totaliser.

1" BSP (F) and inlet and outlet, both with flange for optional flange mounting. The meter allows the inlet and outlet axis to be orientated in four different positions with respect to the register orientation. Maximum working pressure: 10 Bar. Flow range: 10 to 100 l/minute. Precision after calibration: ± 1%

Meter valid for non commercial applications only.

680 301 Diesel meter with mechanical 4 digit register, 100 l/min

Similar to model 680 300, but with 4 digit register.

366 726 In-line volume meter with electronic digital display, 100 l/min

Oval gear meter with electronic digital register for diesel and lubricants up to SAE 240. Reliable, easy to install and simple to calibrate. Resetable partial reading up to 999.9 litres and permanent 6 digits totaliser.

Fluid inlet/outlet: 1" BSP (F). Maximum working pressure: 70 bar. Flow range: 9.5 l/min to 100 l/min. Precision after calibration: \pm 0.5%. Meter works with two AAA 1.5 V alkaline batteries.

NOZZLES

361 000 Aluminium manual nozzle

Fluid inlet: 1" BSP (F). Maximum delivery: 100 l/min. Includes inlet swivel and lockable trigger.

688 300 Automatic nozzle 60 I/min

Fluid inlet: 1" BSP (F). Maximum delivery: 60 l/min.

688 001 Automatic nozzle 80 I/min

Fluid inlet: 1" BSP (F). Maximum delivery: 80 l/min. Includes inlet swivel.

364 030 Inlet swivel

For 1" BSP (F) nozzles. Inlet/outlet threads: 1" BSP (FM).

HOSES

Rubber hoses with swaged terminals, 1"BSP (M). **689 021, 4 m x 19 mm delivery hose**

689 022, 4 m x 25 mm delivery hose

SUCTION ACCESSORIES

Suction hoses

Rubber suction hoses with foot valve. Connection thread 1" BSP (M).

689 030, 25 mm x 2 m Suction hose

689 031, 25 mm x 4 m Suction hose

Telescopic suction tubes

Telescopic suction tubes for connecting directly to the pump inlet. 1" BSP (M) connection, 2" (M) bung adaptor and foot valve with filter.

689 035 Telescopic suction tube, 1,000 mm

For drums or tanks with a maximum height of 900 mm.

689 036 Telescopic suction tube, 1,800 mm

For tanks with a maximum height between 1,000 and 1,800 mm.

689 037 Suction attachment

2 m x 25 mm hose connecting to 1,000 mm/1,800 mm telescopic suction tube.



561 012 561 025 561 026

FLOWSTAR







12 AND 24 V DC GEAR PUMPS FOR OIL

Gear pumps for oil up to ISO VG 320 viscosity with 12 V DC (35 Amp) or 24 V DC (16 Amp) IP-55 motor. Pump gears are manufactured in sintered steel and the pump includes carrying handle and 2 m cable with crocodile clamps.

Maximum delivery: 4.5 l/min. Maximum pressure: 9 bar. Maximum suction head: 2.5 m. Inlet thread: 3/4" BSP (F). Outlet thread: 1/2" BSP (F).

561 012 Oil gear pump. 12 V DC, 5 l/min

561 024 Oil gear pump. 24 V DC, 5 l/min

12 AND 24 V DC GEAR PUMP FOR OIL KITS WITH METER

12 V or 24 V gear pumps for oil equipped with 3 m suction hose with foot valve, 3 m x 1/2" delivery hose and hose end meter 365 603. Approximate delivery: 4 l/min.

561 013 Gear pump for oil kit with meter, 12 V DC

561 025 Gear pump for oil kit with meter, 24 V DC

12 AND 24 DC GEAR PUMPS FOR OIL KITS

12 V or 24 V gear pump for oil equipped with 3 m suction hose with foot valve, 3 m x 1/2" delivery hose and control gun 363 078. Approximate delivery: 4 l/min.

561 014 Gear pump for oil kit, 12 V DC $\,$

561 026 Gear pump for oil kit, 24 V DC



AC OIL PUMPS

561 300

ELECTRIC OIL PUMPS



Internal gear electric pumps for lubricants. 230 V - 50 Hz (single-phase) or 380 V - 50 Hz (three-phase) motor, depending on model, IP-55 protection and on/off switch. Cast iron pump body, sintered steel gears and by-pass valve. Motor with mounting feet, the pump can be mounted horizontally on a flat surface or vertically on a wall.

600 W - 9 I/min - 10 BAR PUMPS

Recommended for use in small distribution systems with one outlet (delivery hose or hose reel with hose end meter).

TECHNICAL DATA	
Electric motor power	600 W (3/4 hp)
Nominal delivery, continuous duty	9 l/m (2.4 US gpm)
Maximum fluid pressure	10 bar (145 psi)
Maximum suction lift	2.5 m (8.3')
Fluid Inlet /outlet threads	3/4" BSP (F) or flange coupling

561 100 Electric oil pump 230 V - 50 Hz - 600 W - 9 l/min - 10 bar Includes a 230 V - 600 W electric motor with 2 m cable.

561 101 Electric oil pump 330 V (three-phase) - 50 Hz - 600 W - 9 I/min - 10 bar Includes a 380 V - 600 W electric motor.

780 W - 13 I/min - 15 BAR PUMPS

Recommended for use in small distribution systems with several outlets (hose reels), but without simultaneous use of two or more outlets.

TECHNICAL DATA	
Electric motor power	780 W (1 hp)
Nominal delivery, continuous duty	13 l/m (3.4 US gpm)
Maximum fluid pressure	15 bar (215 psi)
Maximum suction lift	2.5 m (8.3')
Fluid Inlet /outlet threads	3/4" BSP (F) or flange coupling

561 200 Electric oil pump 230 V - 50 Hz - 780 W - 13 l/min - 15 bar

Includes a 230 V - 780 W electric motor with 2 m cable.

561 201 Electric oil pump 380 V (three-phase) - **50 Hz** - **780 W** - **13 l/min** - **15 bar** Includes a 380 V - 780 W electric motor.

780 W - 10 I/min - 24 BAR PUMPS

Recommended for use in medium size distribution systems with several outlets (hose reels), but without simultaneous use of two or more outlets.

TECHNICAL DATA	
Electric motor power	780 W (1 hp)
Nominal delivery, continuous duty	10 l/m (2.4 US gpm)
Maximum fluid pressure	24 bar (340 psi)
Maximum suction lift	2.5 m (8.3')
Fluid Inlet /outlet threads	3/4" BSP (F) or flange coupling

561 300 - Electric oil pump 230 V 50 Hz - 780 W - 10 l/min - 24 bar

Includes a 230 V - 780 W electric motor with 2 m cable.

561 301 - Electric oil pump 380 V (three-phase) - 50 Hz - 780 W - 10 l/min - 24 bar Includes a 380 V -780 W electric motor.



ELECTRIC OIL PUMPS WITH ELECTRONIC PRESSURE SWITCH

561 210

Internal gear electric pumps for lubricants. 230 V - 50 Hz, IP-55 protection motor with on / off switch. Cast iron pump body, sintered steel gears and by-pass valve. Motor with mounting feet, the pump can be mounted horizontally on a flat surface or vertically on a wall.

Pumps include an electric pressure switch that automatically starts the pump once a delivery gun is opened. Once the gun is closed and the pressure builds up again in the line, then the pressure switch automatically stops the pump.

561 110 Electric oil pump with pressure switch 230 V - 50 Hz - 600 W - 9 l/min - 9.5 bar

Includes a 230 V - 50 Hz - 600 W electric motor with 2 m cable. Recommended for use in small distribution systems with one outlet (delivery hose or hose reel with hose end meter).

TECHNICAL DATA	
Electric motor power	600 W (3/4 hp)
Nominal delivery, continuous duty	9 l/m (2.4 US gpm)
Maximum fluid pressure	9.5 bar (135 psi)
Shut off pressure	10 bar (145 psi)
Start pressure	6 bar (85 psi)
Fluid inlet thread	3/4" BSP (F) or flange coupling
Fluid outlet thread	1" BSP (F)



561 210 Electric oil pump with pressure switch 230 V - 780 W - 13 l/min - 9.5 bar Includes a 230 V - 50 Hz - 780 W electric motor with 2 m cable. Recommended for use in small distribution systems with several outlets (hose reels), but without simultaneous use of two or more

TECHNICAL DATA	
Electric motor power	780 W (1 hp)
Nominal delivery, continuous duty	13 l /m (3.4 US gpm)
Maximum fluid pressure	9.5 bar (135 psi)
Shut off pressure	15.5 bar (220 psi)
Start pressure	6 bar (85 psi)
Maximum suction lift	2.5 m (8.3')
Fluid Inlet thread	3/4" BSP (F) or flange coupling
Fluid outlet thread	1" BSP (F)

561 310 Electric oil pumps with pressure switch 230 V - **780 W** - **10 I/min** - **25 bar** Includes a 230 V - 50 Hz - 600 W electric motor with 2 m cable Recommended for use in medium size distribution systems with several outlets (hose reels), but without simultaneous use of two or more outlets.

TECHNICAL DATA	
Electric motor power	780 W (1 hp)
Nominal delivery, continuous duty	9 l/m (2.4 US gpm)
Maximum fluid pressure	25 bar (360 psi)
Shut off pressure	15.5 bar (220 psi)
Start pressure	6 bar (85 psi)
Maximum suction lift	2.5 m (8.3')
Fluid Inlet thread	3/4" BSP (F) or flange coupling
Fluid outlet thread	1" BSP (F)
Fluid outlet thread	1" BSP (F)







HIGH PERFORMANCE ELECTRIC OIL PUMPS

High performance gear pumps direct coupled to an electric motor with IP-55 ingress protection for the transfer or distribution of large volumes of lubricants.

Pump gears are manufactured in sintered steel and pump body is manufactured in cast iron. The pump is direct coupled to an electric motor. All pumps include an adjustable by-pass valve.

PUMPS WITH 230 V - 50 HZ SINGLE PHASE MOTOR

POWER (W)	PRESSURE (bar)	DELIVERY (I/min)	MAXIMUM FLUID VISCOSITY (cSt)	INLET - OUTLET THREADS	WEIGHT (Kg)	PART No.
750	8	25	< 270	3/4" BSP (F)	15	561 615
1,500	8	50	< 850	1" BSP (F)	21	561 614
2,000	8	70	< 1,550	1" BSP (F)	23	561 611

PUMPS WITH 400 V - 50 HZ THREE PHASE MOTOR

POWER (W)	PRESSURE (bar)	DELIVERY (I/min)	MAXIMUM FLUID VISCOSITY (cSt)	INLET - OUTLET THREADS	WEIGHT (Kg)	PART No.
1,500	10	50	< 850	1" BSP (F)	21	561 613
2,000	10	70	< 1,550	1" BSP (F)	23	561 610



562 100





PORTABLE ELECTRIC OIL PUMPS WITH HOSE END METER

Electric oil pumps assembled onto a mounting plate with carrying handle and fitted with a suction hose for 200 litre drums or 1,000 litre IBCs, delivery hose and hose end meter. Approximate delivery: 5 litres/min.

562 000 Portable electric oil pump with hose end meter

Includes:

- 561 100: Electric oil pump 230 V 600 W 9 l/min 10 bar.
- 756 200: Carrying handle.
- 367 011: Suction hose, 3 m. with foot valve.
- 945 554: 3/4" BSP (M) x 1/2" BSP (M) connection adaptor.
- 362 103: 3 m x 1/2" oil hose.
- 365 603: Hose end meter with semiautomatic non drip nozzle.

562 001 Portable electric oil pump with pressure switch and hose end meter

As per pachage 562 000, but instead of electric pump 561 100 includes electric pump 561 110, 230 V - 600 W - 9 l/min - 10 bar oil pump with electric pressure switch.

MOBILE OIL DISPENSERS FOR 200 LITRE DRUMS WITH ELECTRIC PUMP

562 100 Mobile oil dispensers with electric pump for **200 litre drums** Approximate delivery: 5 l/min.

Includes:

- 561 100: Electric oil pump 230 V 600 W -9 l/min - 10 bar.
- 432 000: Trolley for 200 I drums.
- 360 134: Pump mounting plate.
- 367 011: Suction hose, 3 m. with foot valve.
- 945 554: 3/4" BSP (M) x 1/2" BSP (M) connection adaptor.
- 362 103: 3 m x 1/2" oil hose.
- 365 603: Hose end meter with semiautomatic non drip nozzle.

562 101 Mobile oil dispenser for 200 litre drums with electric oil pump with pressure switch

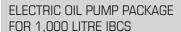
As to model 562 100 but instead of electric pump 561 100 includes electric pump 561 110 a 230 V - 600 W, 9 l/min, 10 bar oil pump with electric pressure switch.



ELECTRIC OIL PUMP PACKAGES

562 206





562 105 Electric pump package for 1,000 litre IBCs

Includes:

- 561 100: Electric oil pump 230 V 600 W 9 l/min 10 bar.
- 360 108: mounting plate for 1,000 I IBCs
- 735 304: Suction hose
- 945 554: 3/4" BSP (M) x 1/2" BSP (M) connection adaptor
- 362 106: 6 m x 1/2" oil hose.
- 365 603: Hose end meter with semiautomatic non drip nozzle.

562 106 Electric pump with pressure switch package for 1,000 litre IBCs

As model 562 105, but instead of electric pump 561 100 includes electric pump 561 110, a 230 V - 600 W - 9 l/min - 10 bar oil pump with electric pressure switch.



ELECTRIC OIL PUMP AND HOSE REEL PACKAGES

Wall mounted pump with hose reel and hose end meter. Packages can be used with 200 I drums or with 1,000 I IBCs using an adequate adaptor for the suction assembly. Delivery approximately 6 I/min.

562 205 Pump + hose reel + meter package for 200 litre drum or 1,000 litre IBCs

Includes

- 561 200: Electric oil pump 230 V 780 W 13 l/min 15 bar.
- 756 201: Wall mounting plate.
- 367 000: Suction assembly for 200 I drums or 1,000 I IBCs
- 945 554: 3/4" BSP (M) x 1/2" BSP (M) connection adaptor
- 501 200: Open type hose reel with 10 m x 1/2" hose
- 365 603: Hose end meter with semiautomatic non drip nozzle.
- 360 127: Drip holster with gun holder.

562 206 Pump + hose reel + meter package for 200 litre drums or 1,000 litre IBCs

As model 562 205, but instead of electric pump 561 200 includes electric pump 561 210 a 230 V - 780 W - 13 I/min - 15 bar oil pump with electric pressure switch.

LUBRICATION AND FLUID HANDLING. PRODUCTS AND ACCESSORIES

GREASE NIPPLES
LEVER ACTION GREASE PUMPS
AIR OPERATED BATTERY AND MANUAL HAND HELD GREASE PUMPS
FILLER PUMPS AND FITTINGS
GREASE CONNECTORS AND NOZZLES
GREASE HOSES AND STEMS
GREASE COMPRESSORS AND BUCKET PUMPS
DRUM PUMPS FOR OIL
DRUM PUMPS FOR OIL AND DIESEL
DRUM PUMPS FOR VARIOUS FLUIDS
FUNNELS, MEASURES, JERRY CANS, BARREL TAPS AND OIL CANS
SUCTION, SPRAY AND BLOW GUNS. WATER GUNS AND TYRE GAUGES
AIR TREATMENT LINITS (FRLs)







GREASE NIPPLES







HYDRAULIC GRE	HYDRAULIC GREASE NIPPLES				
MT 503 STRAIGHT	MT 506 45° ANGLED	MT 508 90° ANGLED	THREAD	PITCH	
011 060	013 060	015 060	Metric	M 6 x 1.00	
011 100	013 100	015 100	Metric	M 7 x 1.00	
011 140	013 140	015 140	Metric	M 8 x 1.00	
011 160	013 160	015 160	Metric	M 8 x 1.25	
011 180	013 180	015 180	Metric	M 9 x 1.00	
011 220	013 220	015 220	Metric	M 10 x 1.00	
011 240	013 240	015 240	Metric	M 10 x 1.25	
011 260	013 260	015 260	Metric	M 10 x 1.50	
011 280	013 280	015 280	Metric	M 12 x 1.00	
011 300	013 300	015 300	Metric	M 12 x 1.25	
011 320	013 320	015 320	Metric	M 12 x 1.50	
011 340	013 340	015 340	Metric	M 12 x 1.75	
011 600	013 600	015 600	BSP	1/8"	
011 620	013 620	015 620	BSP	1/4"	
011 500	013 500	015 500	SAE (UNF)	1/4" (x 28)	
011 520	013 520	015 520	SAE (UNF)	5/16" (x 18)	
011 540	013 540	015 540	SAE (UNF)	3/8" (x 16)	
011 700	013 700	015 700	Whitworth	1/4"	
011 720	013 720	015 720	Whitworth	5/16"	
011 740	013 740	015 740	Whitworth	3/8"	
011 900	013 900	015 900	NPT	1/8"	
011 910	013 910	015 910	NPT	1/4"	
011 930	N.A.	N.A.	No thread	P 6 mm	
011 940	N.A.	N.A.	No thread	P 8 mm	
011 950	N.A.	N.A.	No thread	P 10 mm	



MT 506

HYDRAULIC NIPPLES LONG

MT 505

012 020: Hydraulic nipple, long - M 6 x 1.00.

012 220: Hydraulic nipple, long - 1/4" SAE.





HYDRAULIC GREASE NIPPLES ASSORTMENT

050 001: Assortment of 140 hydraulic grease nipples. Includes straight, 45° and 90° type nipples with the most popular threads.

GREASE NIPPLES TYPE	M 6 x 1.00	M 8 x 1.25	M 10 x 1.00	1/8" BSP
STRAIGHT	25 units	25 units	15 units	15 units
45° ANGLED	10 units	10 units	5 units	5 units
90° ANGLED	10 units	10 units	5 units	5 units



BLISTER PACKED HYDRAULIC NIPPLES

051 060: Includes 20 units of M 6 x 1.00 straight nipples. **051 160:** Includes 20 units of M 8 x 1.25 straight nipples. **051 220:** Includes 10 units of M 10 x 1.00 straight nipples. **051 260:** Includes 10 units of M 10 x 1.50 straight nipples.

051 600: Includes 10 units of 1/8" BSP straight nipples.

052 060: Includes 10 units of M 6 x 1.00, 5 units 45° and 5 units 90° angled nipples. **052 160:** Includes 10 units of M 8 x 1.00, 5 units 45° and 5 units 90° angled nipples. **052 220:** Includes 10 units of M 10 x 1.00, 5 units 45° and 5 units 90° angled nipples. **052 260:** Includes 10 units of M 10 x 1.50, 5 units 45° and 5 units 90° angled nipples.

052 600: Includes 10 units 1/8" BSP, 5 units 45° and 5 units 90° angled nipples.

GREASE NIPPLES



FLUSH TYPE DRIVE OIL NIPPLES		
PART No.	DIAMETER	
031 939	6 mm	
031 949	8 mm	
031 950	10 mm	
031 960	12 mm	



CONCAVE TYPE NIPPLES				
PART No.	THREAD	PITCH		
032 060	Metric	M 6 x 1.00		
032 160	Metric	M 8 x 1.20		
032 220	Metric	M 10 x 1.00		
032 260	Metric	M 10 x 1.50		
032 600	BSP	1/8"		
032 620	BSP	1/4"		
032 740	Whitworth	3/8"		
032 939	No thread	P 6 mm		
032 949	No thread	P 8 mm		
032 959	No thread	P 10 mm		



15 mm HEXAGON HEAD NIPPLES						
PART No.	THREAD	PITCH	PART NO	THREAD	PITCH	
021 060	Metric	M 6 x 1.00	021 340	Metric	M 12 x 1.75	
021 100	Metric	M 7 x 1.00	021 380	Metric	M 14 x 2.00	
021 140	Metric	M 8 x 1.00	021 600	BSP	1/8"	
021 160	Metric	M 8 x 1.25	021 620	BSP	1/4"	
021 220	Metric	M 10 x 1.00	021 500	SAE (UNF)	1/4" (x 28)	
021 240	Metric	M 10 x 1.25	021 520	SAE (UNF)	5/16" (x 18)	
021 260	Metric	M 10 x 1.50	021 540	SAE (UNF)	3/8" (x 16)	
021 280	Metric	M 12 x 1.00	021 700	Whitworth	1/4"	
021 300	Metric	M 12 x 1.25	021 720	Whitworth	5/16"	
021 320	Metric	M 12 x 1.50	021 740	Whitworth	3/8"	



DOUBLE HEXAGON AND ROUND HEAD NIPPLES						
PART No.	DIAMETER	THREAD	PITCH	REMARKS		
022 160	16 mm	Metric	M 8 x 1.25	MT 153 - double hexagon 15 mm		
022 220	16 mm	Metric	M 10 x 1.00	MT 153 - double hexagon 15 mm		
022 260	16 mm	Metric	M 10 x 1.50	MT 153 - double hexagon 15 mm		
022 600	16 mm	BSP	1/8"	MT 153 - double hexagon 15 mm		
022 620	16 mm	BSP	1/4"	MT 153 - double hexagon 15 mm		
023 220	16 mm	Metric	M 10 x 1.00	MT 156 - round head		
023 600	16 mm	BSP	1/8"	MT 156 - round head		
023 620	16 mm	BSP	1/4"	MT 156 - round head		
023 640	16 mm	BSP	3/8"	MT 156 - round head		
024 620	22 mm	BSP	1/4"	MT 157 - round head		
024 640	22 mm	BSP	3/8"	MT 157 - round head		
025 620	22 mm	BSP	1/4"	MT 930 - round head		
025 640	22 mm	BSP	3/8"	MT 930 - round head		





LEVER ACTION GREASE PUMPS

Lever grease pumps

All Samoa lever action grease pumps have the following features and benefits:

• Very robust, real heavy duty, cast iron head for maximum durability, pressure and flow delivered throughout the pump's entire fife.

GENERAL INFORMATION

- Precision machined piston ensures leak free high pressure operation without requiring seals
- Heavy duty knurled barrel with large pitch threads for easy loading.
- Locking follower rod, heavy duty beveled follower and spring.
- Supplied ready to fill using various methods (cartridge, loader pump and suction).

101 200

100 900





500 CC LEVER ACTION GREASE PUMPS

Universal grease pumps to be used with 400 gr (14 oz) grease cartridges or with bulk grease. Bulk grease loading by suction or using a filler pump.

Maximum working pressure: above 300 bar (4,400 psi).

101 202, 500 cc lever action grease pump

Individually boxed, grease pump includes filler valve 128 003.

101 200, 500 cc lever action grease pump

Individually boxed, grease pump includes filler valve 128 003 and rigid stem with a four jaw hydraulic connector (PN 710 214).

101 240, 500 cc lever action grease pump

Individually boxed, grease pump includes filler valve 128 003 and 300 mm single steel braided rubber hose with a four-jaw hydraulic connector (PN 137 031).

101 211, 500 cc lever action grease pump

Packed in Individual plastic bag, grease pump includes rigid stem with a four jaw hydraulic connector (PN 710 214).

500 CC LEVER ACTION GREASE PUMP WITH VARIABLE STROKE

100 900, 500 cc lever action grease pump with variable stroke

Heavy duty lever grease pump for use with bulk grease or 400 gr (14 oz) grease cartridges. Grease pump features variable stroke, which delivers high pressure on the short stroke and high volume on a full stroke. Includes heavy duty cast iron head with hardened piston, bleeder valve, filler nipple, removable check valve and barrel cap for cleaning, and 360° positionable outlet stem with four jaw hydraulic connector.

100 940, 500 cc lever action grease pump with variable stroke

Similar to PN 100 900 but includes a 300 mm single steel braided rubber hose with a four-jaw hydraulic connector (PN 137 031).



167 500 - 168 600



500 CC PISTOL GRIP GREASE PUMPS

Pistol grip grease pump for hard to reach lubrication points. Three way loading: 400 gr (14 oz) cartridges, bulk grease suction or filler pump. Heavy duty cast iron head with precision fit piston. Maximum working pressure: above 250 bar (3,650 psi).

106 200 - 500 cc pistol grip grease pump Individually boxed, grease pump includes filler valve 128 003 and straight rigid stem with a four jaw hydraulic type connector (PN 710 710).

106 240 - 500 cc pistol grip grease pump Individually boxed, grease pump includes filler valve 128 003 and with 300 mm single steel braid reinforced otulet hose with a four-jaw hydraulic type connector (PN 137 031).

102 390



102 390 Push action grease pump

One hand push gun with push on connector.

102 391 Push action grease pump

One hand push gun with hydraulic connectoro.



HAND HELD AIR OPERATED GREASE PUMPS

High pressure, 60:1 pressure ratio, air operated grease pumps. They can be connected to a compressed air line or to the air brake circuit of a commercial vehicle. Delivery: 1 cc each time the trigger is pressed. Maximum air pressure: 10 bar, Air connection thread 1/4" BSP (F).

167 500 - 1,000 cc air operated grease pump

Includes a 1,000 cc barrel with an air driven grease follower. Recommended for high viscosity grease and low temperatures. Supplied with 400 mm double steel braid reinforced outlet hose with 4 jaw connector (PN 141 040) and filler nipple. Bulk grease loading using a grease filler pump.

168 600 - 500 cc air operated grease pump

Includes a 500 cc barrel with a spring driven grease follower. Three way loading: 400 gr (14 oz) grease cartridges, bulk grease suction or with a grease filler pump. Supplied with filler nipple and 400 mm double steel braid reinforced outlet hose with four jaw connector (PN 141 040) and filler nipple.

168 601 - 500 cc air operated grease pump

Similar to model 168 600, includes rigid outlet stem with four jaw connector (PN 710 214).

PUSH ACTION GREASE PUMP **BATTERY GREASE PUMPS** 160 000



160 000, 18 V battery grease pump

For use with standard grease cartridges or bulk grease. High pressure delivery, up to 500 bar (7,200 psi) and 80 gr/min.

Supplied with two high capacity 18 V rechargeable NiMH batteries, 230 V quick battery charger, 1 m outlet hose with hydraulic coupler, bleeder valve and carrying strap. Pump is delivered in a heavy duty carrying case.



FILLER PUMPS AND FITTINGS

108 050

108 502

128 003 - 128 005









GREASE GUN FILLER PUMPS

For quick, clean and easy loading of hand, air or battery operated grease guns fitted with a filler valve. Each unit includes a medium pressure lever action pump with two loader fittings that fit the more popular filling valves (Ø 9 mm and Ø 12.5 mm), drum cover and follower disc.

108 000 Grease gun filler pump for 12, 18 kg kegs

Includes a 310 mm drum cover.

108 050 Grease gun filler pump for 20 kg kegs

Includes a 330 mm drum cover.

108 100 Grease gun filler pump for 50 kg drums

Includes a 405 mm drum cover.

FILLER PUMPS FOR CENTRALIZED GREASING UNITS

Medium pressure lever action pump with 1.5 m hose and a 2-HK (1/4") hydraulic connector for filling the reservoir of centralized greasing systems. Includes pump, cover, hose, and hydraulic connector.

108 501 Centralized greasing unit filler pump for 12, 18 kg kegs

Includes a 310 mm drum cover.

108 502 Centralized greasing unit filler pump for 20 kg kegs

Includes a 330 mm drum cover.

108 503 Centralized greasing unit filler pump for 50 kg drums

Includes a 405 mm drum cover.

FILLER VALVES AND LOADER FITTINGS

128 003 Grease gun filler valve, Ø 9 mm.

128 033 Grease gun filler valve, Ø 12 mm.

128 005 Grease loader fitting

For Ø 9 mm valve. 1/4" BSP (M)

128 004 Grease loader fitting

For Ø 12.5 mm valve. 1/4" BSP (M)

SAMOA

121 050 - 121 000

121 020 - 121 011













127 090



127 091



127 093



126 400



123 011





124 011

126 200



126 500

HIGH PRESSURE GREASE **CONNECTORS**

For use with air operated pumps or hand greasing units for hydraulic grease nipples (DIN 71412). Connector head, contact surface and jaws manufactured in hardened steel. Maximum working pressure: 500 bar. Connection thread: 1/8" BSP (F).

121 050, three-jaw high pressure grease connector Ø 18 mm x L 43 mm.

121 000, three-jaw high pressure narrow grease connector

Ø 15 mm with check valve.

GREASE CONNECTORS

For use with greasing units for hydraulic grease nipples (DIN 71412). Connector head and jaws manufactured in hardened steel. Maximum working pressure: 500 bar. Connection thread: 1/8" BSP (F).

121 011, four- jaw high pressure grease connector Ø 15 mm x L 37 mm.

121 020, four- jaw high pressure grease connector Ø 15 mm x L 37 mm with check

121 041, three-jaw high pressure narrow connector Ø 15 mm x L 37 mm.

HOOK ON SLIDE **CONNECTORS**

For use with hand operated units on button head nipples. Recommended working pressure: 150 bar.

122 011 Giant hook on grease connector

For Ø 22 mm button head nipples.

127 090 Slide on connector

127 091 Hook on connector

127 093 Knuckle jointed slide on connector

GREASE CONNECTORS AND **NOZZLES**

For use with hand operated grease guns only. Connection thread: 1/8" BSP (F).

124 011 Grease zerk nozzle For Zerk grease nipples DIN 3402.

123 011 Grease cupped nozzles

For concave type nipples DIN 3405.

123 001 Giant cupped nozzle Dispenses a fine line of grease.

126 000 Grease needle nozzle With retractable safety sleeve.

126 200 Seal off adaptor For lubrication holes, spindles, U joints.

126 500 Needle nose adaptor For hard to reach greasing points.

126 400, 90° Swivelling adaptor

For use with flexible hoses 1/8" BSP (MF).

126 100 Quick connect adaptor

For Ø 15 mm hydraulic connectors.



GREASE HOSES AND STEMS

SINGLE STEEL BRAID GREASE OUTLET HOSES (Ø 13 MM)

Single steel braid reinforced safety rubber hoses for use with hand operated greasing equipment. Maximum working pressure: 360 bar (4,350 psi). Minimum burst pressure: 900 bar (12,850 psi). 1/8" BSP (M) threads.



137 021	Steel braid reinforced outlet hose with four-jaw connector	250 mm
137 031	Steel braid reinforced outlet hose with four-jaw connector	300 mm
137 041	Steel braid reinforced outlet hose with four-jaw connector	400 mm
137 051	Steel braid reinforced outlet hose with four-jaw connector	450 mm
137 201	Steel braid reinforced outlet hose with four-jaw connector	2.000 mm



136 021	Steel braid reinforced outlet hose	250 mm
136 031	Steel braid reinforced outlet hose	300 mm
136 041	Steel braid reinforced outlet hose	400 mm
136 051	Steel braid reinforced outlet hose	450 mm
136 201	Steel braid reinforced outlet hose	2,000 mm

DOUBLE STEEL BRAID GREASE OUTLET HOSES (Ø 13 MM)

Double steel braid safety rubber hoses for use with air operated greasing equipment. Maximum working pressure: 500 bar (7,250 psi). Minimum burst pressure: 1,650 bar (24,000 psi). 1/8" BSP (M) threads.



141 020	Double steel braid outlet hose with four-jaw connector	250 mm
141 030	Double steel braid outlet hose with four-jaw connector	300 mm
141 040	Double steel braid outlet hose with four-jaw connector	400 mm
141 050	Double steel braid outlet hose with four-jaw connector	450 mm
141 200	Double steel braid outlet hose with four-jaw connector	2,000 mm



140 020	Double steel braid reinforced outlet hose	250 mm
140 030	Double steel braid reinforced outlet hose	300 mm
140 040	Double steel braid reinforced outlet hose	400 mm
140 050	Double steel braid reinforced outlet hose	450 mm
140 200	Double steel braid reinforced outlet hose	2,000 mm

NYLON BRAID HOSES POLYAMIDE COATED

Working pressure: 400 bar. Burst pressure: 900 bar

130 021	9" Hose. 1/8" BSP male both ends	
130 031	12" Hose. 1/8" BSP male both ends	
130 041	18" Hose. 1/8" BSP male both ends	
130 061	24" Hose. 1/8" BSP male both ends	
139 150	Snap-on hose and connector assemble. 1.5 m hose $1/8$ " BSP male both ends	





710 214	Angled rigid stem with four-jaw connector
710 710	Straight rigid stem with four-jaw connector
710 659	Positionable angled rigid stem with four-jaw connector with check valve
710 297	Straight rigid stem with cupped nozzle
710 298	Straight rigid stem with zerk nozzle
710 215	Angled rigid stem only



151 102 150 000 320 400







HIGH PRESSURE GREASE PUMPS

High pressure steel pumps to be mounted directly onto original grease kegs. Maximum pressure: 350 bar (5,000 psi). Delivery per stroke 2 cc.

Pump equipped with carrying handle, cover with pump adaptor, follower disc and 1.5 m high pressure hose with rigid stem and four-jaw hydraulic connector.

151 100 High pressure grease pump for 12.5 to 18 kg kegs

Includes a 310 mm drum cover.

151 102 High pressure grease pump for 20 kg kegs

Includes a 330 mm drum cover.

BUCKET PUMPS

Bucket pumps include a 16 litre leak proof, all steel oval shaped bucket with carrying handle and foot rest for easy handling and stability.

150 000 Multipressure grease bucket pump 16 kg

Heavy duty high capacity grease pump with three alternative lever positions, which can be used under any operating conditions and with all type of lubricants (winter / summer, high or low viscosity grease, oil). Maximum pressure range between 175 to 350 bar (2,500 to 5,000 psi) with a delivery of 20 gr, 15 gr or 10 gr per stroke depending on the position of the lever chosen. Pump includes 1.5 m high pressure hose with a three-jaw hydraulic connector (PN 715 429).

320 400 Oil bucket pump 16 litres

For dispensing high viscosity lubricants. Includes a medium pressure lever action pump (100 cc delivery per stroke) with a 1.5 m rubber hose with shut off valve and 135° angled nozzle.

PEDAL ACTION GREASE PUMP 5 kg

157 000

157 000 Pedal action grease pump

Pedal action heavy-duty grease pump. Spring primed follower plate and cast iron pump mechanism ensures that the pump can be used even with extremely viscous grease. Maximum pressure: 500 bar (7,150 psi).

Delivery per pedal stroke: 2 gr.

Steel leak proof reservoir, can hold up to 5 kg of grease. Includes air bleeder valve and 2 m high pressure grease hose with a four jaw hydraulic connector with check valve.





DRUM PUMPS FOR OIL

605 000

304 500

320 300





HIGH PERFORMANCE DRUM PUMP

605 000 High performance drum pump

Lever action transfer pump for use with all types of lubricants, even those with higher viscosity, like gear oil. Lever can be mounted in four different positions that changes the delivery volume per stroke: 0.10 litre, 0.15 litre, 0.20 litre or 0.25 litre per stroke. Pump includes telescopic suction tube that can be used with 60 and 205 litre drums and 2" bung adaptor.

Not included option:

• **314 540** Rubber delivery hose, 1.5 m, with shut off valve and nozzle.

LEVER ACTION DRUM PUMP

304 500 Lever action drum pump

Lever action drum pump for the transfer of light lubricants from 60 to 205 litre drums. Steel pump body, delivery spout and telescopic suction tube. Steel piston with brass rings and NBR seals. With 2" and M64 x 4 bung adaptors. Delivery 0,35 litre per stroke.

GEAR OIL DISPENSERS

Medium pressure lever action pump mounted on a drum cover to fit directly onto original pails. Pump equipped with 1.5 m transparent hose with 135° angled nozzle.

320 300 Gear oil dispenser

With 330 mm cover for 20 litre pails.

320 310 Gear oil dispenser

With 310 mm cover for 12 to 18 litre pails

320 320 Gear oil dispenser for square cans

With adjustable bracket for square containers (385 to 285 mm).

741 602 Carrying handle

Fits on 310 and 330 mm drum covers.

306 100 + 314 540



MEDIUM PRESSURE PUMPS

Lever action transfer pumps for high viscosity lubricants. Pump includes 2" height adjustable bung adaptor to fit directly onto drums, covers or containers. Pump with steel suction tube, foot valve and piston and NBR seals. Delivery: 100 cc per stroke. Outlet thread: 3/4" BSP (M).

Medium pressure transfer pump

306 300 for 20 litre pails. 450 mm long suction tube.

306 200 for 20 and 60 litre drums. 620 mm long suction tube.

306 100 for 60 litre drums. 760 mm long suction tube.

306 400 for 205 litre drums. 1,100 mm long suction tube.

Accessories:

• 730 603 Angled steel delivery spout

Fits directly to the pump outlet.

• 314 530 Delivery hose

Transparent 1.5 m hose with 135° nozzle.

• 314 540 Delivery hose. 1.5 m rubber hose, with shut off valve and 135° nozzle.



307 900

320 300





MEDIUM PRESSURE PUMP

Double acting semi-rotary pumps with cast iron body and brass vanes suitable for a wide range of fluids, including petroleum based products, diesel, water and water based solutions of non corrosive fluids.

307 906 No. 0, 1/2" inlet/outlet. 15 litres per min. flow rate. **307 900** No. 1, 3/4" inlet/outlet. 25 litres per min. flow rate. **307 901** No. 2, 1" inlet/outlet. 35 litres per min. flow rate. **307 902** No. 3, 1-1/4" inlet/outlet. 45 litres per min. flow rate. **307 905** No. 5, 1-1/2" inlet/outlet. 65 litres per min. flow rate.



GEAR OIL UNITS

A range of adapters to convert the 2" BSP thread to fit the various threads available on drums and barrels.

320 290.202, 20/25 gear oil pump and hose assembly with trolley for use with round plastic drum with trisure internal thread.

320 290.205, 20/25 gear oil pump and hose assembly with trolley for use with plastic drum with pull up spout, overall height 463 mm.

320 290.207, 20/25 gear oil pump and hose assembly with trolley for use with rectangular plastic drum with pull up spout, overall height 405 mm.

320 290.209, 20/25 gear oil pump and hose assembly with trolley with 2" BSP male thread.

320 390.202, 20/25 gear oil pump and hose assembly for use with round plastic drum with trisure internal thread.

320 390.205, 20/25 gear oil pump and hose assembly for use with plastic drum with pull up spout, overall height 463 mm.

320 390.207, 20/25 gear oil pump and hose assembly for use with rectangular plastic drum with pull up spout, overall height 405 mm.

320 390.209, 20/25 gear oil pump and hose assembly with 2" BSP male thread

430 800 Trolley only

For gear oil unit.

ROTARY PUMP

Rotary action pump for continuous transfer of light to medium viscosity petroleum based products and other non corrosive fluids. Delivery: 0.3 I per revolution (30 I / min.), height adjustable M2"G bung adaptor, 1.040 mm steel suction tube and 1.3 m delivery hose.

308 000 Rotary pump

205 litre drums.

308 100 Rotary pump

4 ft tanks.

308 099 Economy rotary pump

205 litre drums.

308 101 Rotary pump

Includes non drip nozzle, 360° swiveling outlet pipe, and telescopic suction tube for barrels and tanks up to 4 ft (1,200 mm) deep. SAMOA

DRUM PUMPS FOR VARIOUS FLUIDS

300 401

302 001

300 007

304 509







LIFT ACTION PUMPS FOR CHEMICAL FLUIDS

300 500 Lift action pump for chemicals 50 litre drums Lift action pump with nylon covered piston and PTFE seals. 500 mm suction tube.

Ø 60 mm bung adaptor with three screws and outlet spout. Black pump with yellow bung adaptor and spout nut. Recommended for use with solvents.

300 501 Lift action pump for chemical products, 200 litre drums

Same as model 300 500, but with 1,000 mm suction tube for 220 litre drums.

300 401 Lift action pump for chemical products 200 litre drums

Lift action pump with polypropylene covered piston and PTFE seals. 1,000 mm suction tube, 2" bung adaptor and outlet spout. Black pump with red bung adaptor and spout put

Recommended for use with acid based fluids, detergents and kerosene based solvents.

300 200 Polypropilene lift pump 500 mm down tube.

300 201 Polypropilene lift pump

1,000 mm down tube.

300 300 Nylon lift tube 500 mm down tube.

300 301 Nylon lift tube 1,000 mm down tube.

NOTE: Please check fluid compatibility with the pump prior to its use.

SIPHON TRANSFER PUMP

302 001 Siphon transfer pump

Lever action siphon pump. Design allows transfer by syphon once the pump has been primed, giving a continuous flow of 8 I/min. Bung thread fits 50 and 220 litre drums. With 1.5 m clear delivery hose, metal nozzle and PVC suction tube. For anti-freeze, light mineral oils, diesel, detergent and other automotive and light petroleum fluids.

LEVER PUMP

Lever action pump with a unique design incorporating a toggle mechanism in the handle linkage to correct piston to shaft geometry and create a smooth operation.

All polypropylene construction, includes a 2" bung adaptor and an adjustable nut to enable the pump to be locked in the correct position on the drum for easy operation. The pump delivers 500 cc/stroke

300 006 lever action pump with EPDM seal

300 007 lever action pump with viton seal

DRUM PUMPS FOR FLUIDS

304 509 Drum pump for fluids

As pump 304 500 but with Viton seals, provides an economical solution for the transfer of fluids such as antifreeze (glycol), alcohol, degreasers, solvents and lubricants. To avoid pump corrosion, when used with fluids other than lubricants, it is strongly recommended to flush the pump with diesel after use.

SAMOA

300 000 - 300 101 300 100

300 598 - 300 599

591 600



MANUAL SYPHON PUMP

300 000 Suction operated syphon pump

390 mm suction tube, suitable for 20 litre jerry cans/containers.

300 101 Piston operated syphon pump

860 mm suction tube, suitable for 210 / 250 litre drums.

300 100 Piston operated syphon pump

590 mm suction tube, suitable for up to 60 litre drums.



STAINLESS STEEL LIFT PUMPS

300 598 Lift pump

940 mm downtube, suitable for 205 litre drums.

300 599 Mini lift pump

500 mm downtube.



BATTERY OPERATED PUMP

591 600 Battery operated pump Ideal for transferring non corrosive fluids. Simple push button operation

fluids. Simple push button operation and it is capable of pumping 9 litres a minute.



CONVERTING ADAPTORS

A range of adaptors to convert the 2" BSP thread to fit the various threads available on drums and barrels.

317 911 Adaptor 2" BSP to 2" Trisure.

317 912 Adaptor 2" BSP to 2" Mauser.

317 913 Adaptor 2" BSP to DIN 61.

317 914 Adaptor 2" BSP to 59 mm Tournex.

317 915 Adaptor 2" BSP to DIN 51.

317 916 Adaptor 2" BSP to 63 mm.

317 917 Adaptor 2" BSP to DIN 71.



FUNNELS AND OIL DRAIN PANS

670 017, 160 mm off-set funnel with handle and brans filter.

670 006 Plastic drain pan with 6 litre capacity.

670 007 Plastic drain pan with 14 litre capacity.

GRADUATING MEASURES

675 007 set of seven plastic measuring jugs.

0.1 - 0.25 - 0.50 - 1.0 - 2.0 - 3. 0 & 50 litres.



FUNNELS, MEASURES, JERRY CANS, BARREL TAPS AND OIL CANS

670 019 - 671 030 - 675 002

622 010 - 622 020

318 000 - 318 001 318 100 - 318 200







FUNNELS - MEASURES

Funnels with flexible spout

No spill, no splash, quick discharge funnels. With filter and flexible spout for hard to reach places.

670 019 Funnel with filter and flexible spout

190 mm diameter. 2 litre capacity.

670 023 Funnel with filter and flexible spout

230 mm diameter. 3.5 litre capacity.

Industrial funnels

Large capacity funnels, 5 litre. 300 x 200 x 300 mm.

671 030 Industrial funnel

With filter for diesel.

671 031 Industrial funnel

With filter for lubricants.

679 000 Flexible extension for industrial funnels.

Fluid Measures

For lubricants, antifreeze, brake fluid, petroleum, diesel, etc. Moulded in high density polyethylene, with flexible spout.

675 001 Plastic measure

Graduated 0 - 1 litre.

675 002 Plastic measure

Graduated 0 - 2 litre.

675 003 Plastic measure

Graduated 0 - 3 litre.

675 005 Plastic measure

Graduated 0 - 5 litre.

679 001 Small flexible extension

For 1, 2 and 3 litre measures and for Ø 190 mm diameter funnels.

679 002 Large flexible extension

For 5 litre measures and for 230 mm diameter funnels.

STEEL JERRY CANS

Green colour with protective paint in the inside. With no outlet spout.

622 005, 5 litres Jerry can

622 010, 10 litres Jerry can

622 020, 20 litres Jerry can U.N. approved

Options:

- 629 001 Painted outlet spout for jerry cans
- 629 002 Zinc plated outlet spout for jerry cans.



Metal bodied oil cans. Lever action. Armoured flexible spout.

176 100 Metal bodied oil can

Capacity 200 cc.

176 200 Metal bodied oil can

Capacity 300 cc.

176 300 Metal bodied oil can

Capacity 500 cc.

Polyethylene bodied oil cans. Lever action. Armoured flexible spout.

175 200 Polyethylene bodied oil can Capacity 300 cc.

175 300 Polyethylene bodied oil can Capacity 500 cc.

175 400 Polyethylene bodied oil can Capacity 750 cc.

179 500 Armoured spout for all oil cans

BARREL TAPS

Fit 60 to 205 litre drums placed horizontally.

318 000 Metal bodied, self closing lockable 3/4" BSP (M).

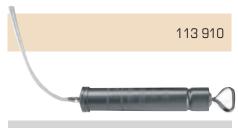
318 001 Metal bodied

2" BSP (M).

318 100 Plastic bodied.

3/4" BSP (M).

318 200 Plastic bodied 2" BSP (M).



OIL SUCTION GUNS

For lubricant suction and discharge for loading or refilling transmissions, gear boxes, filters, etc.

113 710 Oil suction gun

500 cc with 290 mm pvc hose.

113 700 Oil suction gun

500 cc with one angled and one straight steel outlets.

113 910 Oil suction gun

800 cc with 290 mm PVC hose.

SUCTION, SPRAY AND BLOW GUNS. WATER GUNS AND TYRE GAUGES



184 100

184 000

187 000

208 600









SUCTION GUNS

184 100 Brake bleeding gun

Economical gun for individual brake circuit bleeding in vehicles.

When the bleeder nipple is connected to the brake circuit bleeder, then vacuum created by using compressed air sucks the brake fluid out through a transparent hose into a 0.75 litre. container. Inlet thread: 1/4" BSP (F)

184 150 Fluid suction gun

As model 184 100, but includes a hose without bleeder nipple for sucking out fluids from hard to reach places. Can be used for waste oil suction in small boats, lawn mowers, etc. Air consumption: 180 l/min. 0.75 litre container included.

SPRAY GUN

184 000 Thermoplastic spray gun

Light spray gun manufactured in high quality chemical resistant thermoplastic and metallic long reach outlet. For spray cleaning using chemical products and spraying parts with corrosion protection fluids or lubricants.

Adjustable outlet nozzle. Capacity 1 litre. Maximum air pressure: 10 bar. Minimum air pressure: 3 bar. Inlet thread: 1/4" BSP (F).

184 050 Thermoplastic spray gun

As model 184 000 but with thermoplastic outlet for maximum chemical compatibility.

INDUSTRIAL SPRAY GUN

187 000 Industrial spray gun

Heavy Duty spray gun manufactured in steel, brass and aluminium, with syntherised powder coating finishing. For spray cleaning using chemical products and for spraying parts with corrosion protection fluids or lubricants.

Adjustable outlet nozzle. Capacity 1 litre. Maximum air pressure: 10 bar. Minimum air pressure: 3 bar. Connection for Ø 8 mm hose. Inlet thread: 1/4" BSP (M).

HAND TYRE PUMP

High pressure and large delivery hand tyre pumps. Very robust design, with cylinder piston shaft (not rod piston shaft) on a zinc alloy base. Maximum delivery pressure: 12 bar.

208 500 Hand tyre pump 200 cc

For bicycles, motorbikes...

208 600 Hand tyre pump 300 cc.

For passenger cars.

208 700 Hand tyre pump 400 cc.

For tractors, trucks, vans..

208 501 Hand tyre pump With pressure gauge 200 cc. 208 601 Hand tyre pump With pressure gauge 300 cc. 208 701 Hand tyre pump

208 701 Hand tyre pump With pressure gauge 400 cc.

188 000

184 201

186 000 - 185 001

199 800 - 195 000



INDUSTRIAL BLOW GUN

188 000 Blow gun, industrial quality

Heavy duty blow gun manufactured in aluminium with powder coating finishing. A brass extension tube can be fitted. Connection for Ø 8 mm. hose. Inlet thread: 1/4" BSP (M).

718 229 Extension tube for blow gun



BLOW GUN

Guns for cleaning or drying parts with compressed air. Manufactured in high quality chemical resistant thermoplastic. Inlet thread: 1/4" BSP (F).

184 200 Blow gun

184 201 Blow gun with flow regulator



WATER AND WASH GUNS

186 000 water gun

Low pressure water gun (8 bar). Inlet thread: 1/4 BSP (F).

185 001 wash gun

Medium pressure, up to 30 bar, wash gun. Fitted with a Ø 3.5 mm nozzle as standard that can be replaced with an Ø 2.5 mm nozzle if a higher pressure flow is required. On/off and flow regulation knob. Inlet thread: 1/2" BSP (F).



TYRE INFLATOR GUNS

199 800 Tyre inflator gun

One hand operation tyre inflator gun. 0 - 10 bar calibrated pressure gauge with rubber shroud for protection. 650 mm hose with automatically adjusting nozzle. Connection for Ø 8 mm. hose. Inlet thread: 1/4" BSP (M).

195 000 Tyre inflator gun EEC approved

Tyre inflator with trigger filling and pressure release button. Pressure gauge, officially approved and calibrated in accordance with directive 86/217 EEC. Connection for Ø 8 mm. hose. Inlet thread: 1/4" BSP (M).



AIR TREATMENT UNITS (FRLs)

Air line filters

To protect valves, pump motors or pneumatic tools from damage or wear caused by dirt and moisture contained in compressed air. Sintered brass filter element and moisture separator. Semiautomatic bleeding valve.

GENERAL INFORMATION

Pressure regulator

To maintain a selected air pressure constant (between 0 to 12 bar) eliminating over pressure risks and erratic operation of equipment. Also available combined with an air filter forming a compact unit.

Air line lubricators

To create an oil mist that helps increase service life of pumps and other air tools. Oil fill port on top and oil mist adjustment knob.

242 102

241 001

240 000 - 240 200



AIR TREATMENT COMPONENTS Ø 3/4"

Connection threads: 3/4" BSP (FF).

242 102 Combined air filter - regulator and lubricator, Ø 3/4"

242 201 Air line regulator, Ø 3/4", 0 to 12 bar.

242 302 Air filter, Ø **3/4**" Semiautomatic bleeding.

242 402 Air lubricator, Ø 1/2"



AIR TREATMENT COMPONENTS Ø 1/2"

Connection threads: 1/2" BSP (FF) with 1/2" BSP (M) - 3/8" BSP (F) adaptors.

241 001 Combined air filter, regulator and lubricator, Ø 1/2"

241 501 Combined air filter, regulator, Ø **1/2**", 0 to 12 bar.

241 201 Air line regulator, Ø 1/2" 0 to 12 bar.

241 301 Air filter, Ø **1/2**" Semiautomatic bleeding.

241 401 Air lubricator, Ø 1/2"



AIR TREATMENT COMPONENTS Ø 1/4"

Connection threads: 1/4" BSP (FF).

240 000 Combined air filter, regulator and lubricator, Ø 1/4"

240 500 Combined air filter, regulator, Ø **1/4**", 0 to 12 bar.

240 201 Air line regulator, Ø 1/4" Without pressure gauge.

240 200 Air line regulator, Ø 1/4" With pressure gauge.

240 300 Air filter, Ø 1/4" Semiautomatic bleeding.

240 400 Air lubricator, Ø 1/4"

AIR HOSES 246 010

Low pressure hoses for compressed air, eacj emd with female swaged fitting and double male adaptor.

PART No.	LENGTH	INT. Ø	CONNECTION THREADS	WORKING PRESSURE
246 006	0.6 m	1/4" - 6 mm	1/4" BSPT (MM)	15 bar
246 010	1.0 m	1/4" - 6 mm	1/4" BSPT (MM)	15 bar
246 015	1.5 m	1/4" - 6 mm	1/4" BSPT (MM)	15 bar
246 030	3.0 m	1/4" - 6 mm	1/4" BSPT (MM)	15 bar
246 060	6.0 m	1/4" - 6 mm	1/4" BSPT (MM)	15 bar
246 100	10.0 m	1/4" - 6 mm	1/4" BSPT (MM)	15 bar
246 150	15.0 m	1/4" - 6 mm	1/4" BSPT (MM)	15 bar
247 706	0.6 m	3/8" - 10 mm	3/8" BSPT (M) - 1/2" BSPT (M)	15 bar
247 710	1.0 m	3/8" - 10 mm	3/8" BSPT (M) - 1/2" BSPT (M)	15 bar
247 715	1.5 m	3/8" - 10 mm	3/8" BSPT (M) - 1/2" BSPT (M)	15 bar



WORKSHOP FURNITURE

WORK BENCHES	 	136
TOOL CABINETS AND BOARDS	 	138
SERVICE TROLLEYS	 	139
ACCESSORIES		1/10





WORK BENCHES



Very robust all steel construction and epoxy coated finish. Includes one module with lockable shutter with one drawer, divided in 16 compartments, and one additional module with one shelf with large load capacity.

285 100 Heavy duty work bench with shutter

Dimensions: 1,750 x 750 x 855 mm.

Gross weight: 172 kg.

Steel top workbenches with two lockable drawers.

280 530* Steel top work bench with two drawers

Dimensions: 1,750 x 750 x 855 mm.

Gross weight: 100 kg.

280 430* Steel top work bench with two drawers

Dimensions: 1,500 x 750 x 855 mm.

Gross weight: 92 kg.

Steel top workbenches with one lockable drawer.

280 520* Steel top work bench with one drawer

Dimensions: 1,750 x 750 x 855 mm.

Gross weight: 90 kg.

280 420* Steel top work bench with one drawer

Dimensions: 1,500 x 750 x 855 mm.

Gross weight: 81 kg.

280 320* Steel top work bench with one drawer

Dimensions: 1,250 x 750 x 855 mm.

Weight: 73 kg.

^{*} Products delivered as kits.

WORK BENCHES





280 510* Wooden top work bench

Beech wood worktop with steel shelf and lateral supports. One or two optional drawers (part number 284 100) can be fixed to the wooden top. Dimensions: 1,750 x 750 x 885 mm. Gross weight: 77 kg.

Very robust all steel worktop with four "Z" shaped crossbeams, maximum load up to 2,000 kg. Rectangular holes on the beams allow to fix drawers in different positions. Rectangular holes on worktop sides to fix tool board or cabinet brackets or to adjoin other benches.

Lateral supports can be fixed to the floor for maximum stability.

280 500* Steel top work bench

Dimensions: 1,750 x 750 x 885 mm. Gross weight: 78 kg.

280 400* Steel top work bench

Dimensions: 1,500 x 750 x 885 mm. Gross weight: 70 kg.

280 300* Steel top work bench

Dimensions: 1,250 x 750 x 885 mm. Gross weight: 62 kg.

280 200* Steel top work bench

Dimensions: 1,000 x 750 x 885 mm. Gross weight: 54 kg.

280 100* Steel top work bench

Dimensions: 750 x 750 x 885 mm. Gross weight: 47 kg.

ADDITIONAL SHELVES FOR WORK BENCHES



To increase storage capacity under steel or wooden top workbenches. They include two transversal beams to fix the shelf to the side supports. Screws included.

289 309 Additional shelf for workbenches

Dimensions: 1,750 x 500 mm. Gross weight: 21 kg.

289 307 Additional shelf for workbenches

Dimensions: 1,500 x 500 mm. Gross weight: 18 kg.

289 305 Additional shelf for workbenches

Dimensions: 1,250 x 500 mm. Gross weight: 16 kg.

^{*} Products delivered as kits.



TOOL CABINETS AND BOARDS



Tool cabinets with lockable shutter. Perforated tool panel for maximum capacity with tool hanging accessories included. Cabinets can be fixed to the wall, to a steel top work bench or to a heavy duty work bench using optional brackets.

281 500 Tool cabinet

Dimensions: 1,750 x 750 x 190 mm.

Gross weight: 50 kg. Includes a set of 9 tool brackets and a 45 hook set 289 101.

281 400 Tool cabinet

Dimensions: 1,500 x 750 x 190 mm.

Gross weight: 45 kg. Includes a set of 9 tool brackets and a 45 hook set 289 101.

281 300 Tool cabinet

Dimensions: 1,500 x 750 x 190 mm.

Gross weight: 38 kg. Includes a set of 7 tool brackets and a 30 hook set 289 100.

281 200 Tool cabinet

Dimensions: 1,250 x 750 x 190 mm.

Gross weight: 32 kg. Includes a set of 7 tool brackets and a 30 hook set 289 100.

289 105 Set of brackets for fixing a cabinet to a workbench



Steel perforated panel for tool organisation. Can be fixed to the wall, to a steel top work bench or to a heavy duty work bench using optional brackets.

282 500 Tool board

282 500

Dimensions: 1,750 x 750 x 20 mm. Gross weight: 17 kg. Includes a set of 9 tool brackets and 45 hooks set 289 101.

282 400 Tool board

Dimensions: 1,500 x 750 x 20 mm. Gross weight: 16 kg. Includes a set of 9 tool brackets and 45 hooks set 289 101.

282 300 Tool board

Dimensions: $1,250 \times 750 \times 20$ mm. Gross weight: 13.5 kg. Includes a set of 7 tool brackets and 30 hooks set 289 100.

282 200 Tool board

Dimensions: $1,000 \times 750 \times 20$ mm. Gross weight: 12.5 kg. Includes a set of 7 tool brackets and 30 hooks set $289\ 100$.

282 100 Tool board

Dimensions: 750 x 750 x 20 mm. Gross weight: 6 kg. Includes 1 multi-tool bracket and 30 hooks.

289 205 Set of brackets for fixing a board to a workbench

289 206 Set of brackets for fixing board 282 100 to a service trolley



283 900 283 100

283 202

283 201









TROLLEY WITH SHELVES

283 900* Trolley with shelves

Trolley with three shelves, four castors (Ø 40 mm) and 80 kg maximum load capacity. Dimensions: 615 x 400 x 755. Gross weight: 11 kg.

STANDARD SERVICE TROLLEY

283 100* Standard service trolley

Service trolley with three shelves, two fixed wheels and two castors (Ø 80 mm).

Middle shelf can be mounted in two different positions.

Maximum load capacity: 200 kg. Dimensions: 840 x 450 x 910 m. Gross weight: 20 kg.

HD SERVICE TROLLEY

Very robust service trolley with three shelves, two large wheels (Ø 160 mm) and two castors (Ø 100 mm), one of them with brake for better stability and safety. Middle shelf can be mounted in two different positions, maximum load capacity: 200 kg.

283 202* Heavy duty service trolley with drawer

Includes drawer 284 201. Dimensions: 880 x 610 x 930 m. Gross weight: 28 kg.

283 200* Heavy duty service trolley

Dimensions: 880 x 610 x 930 m. Gross weight: 21 kg.

SERVICE TROLLEY

283 201* Service trolley

Service trolley with three shelves, drawer and tool board, with one tool bracket with 30 hooks, for hanging tools. Very robust construction with two large wheels (Ø 160 mm) and two castors (Ø 100 mm) one of them with brake for better stability and safety. Maximum load capacity: 200 kg. Gross weight: 35.5 kg.

^{*} Products delivered as kits.

SAMOA



DRAWER FOR WORK BENCH

284 100 Drawer for service workbench

Drawer with lock and tray to be fitted directly under the steel or wood worktop of workbenches. Load capacity: 100 kg. Dimensions: 660 x 145 x 505 mm. Gross weight: 11 kg.

ACCESSORIES



DRAWER FOR SERVICE TROLLEY

284 201 Drawer for service trollevs

Drawer with telescopic guides to be fitted directly to the top shelf of service trolleys.

Load capacity: 24 kg. Dimensions: 472 x 415 x 60 mm. Gross weight: 7 kg.

282 501



PERFORATED PANELS FOR TOOL ORGANISATION

Perforated panel for fitting hooks and other tool hanging accessories. Strong steel frame with two wall brackets.

282 501 Perforated panel 1.750 mm

Dimensions 1,750 x 750 x 20 mm. Gross weight: 10 kg. 282 401 Perforated panel 1.500 mm

Dimensions 1,500 x 750 x 20 mm. Gross weight: 9 kg.

282 301 Perforated panel 1.250 mm

Dimensions 1,250 x 750 x 20 mm. Gross weight: 7.5 kg.

282 201 Perforated panel 1.000 mm

Dimensions 1,000 x 750 x 20 mm. Gross weight: 6.5 kg.

282 101 Perforated panel 720 mm

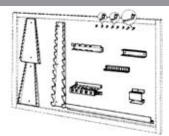
Dimensions 720 x 750 x 20 mm. Gross weight: 5 kg.

STANDARD ACCESSORY SETS FOR TOOL BOARDS AND CABINETS

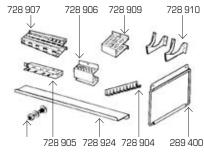
Set of accessories for an optimum organisation of tools on boards and in cabinets. Each set includes the hooks and tool brackets mentioned in the following table:

289 108 289 107 289 106 728 901 728 900 728 903 728 902 728 907 728 905 728 904 728 906 PART No. 289 101 2 1 1 1 289 100 289 109

289 101



TOOL SUPPORTS AND BRACKETS **PART No.** DESCRIPTION **DIMENSIONS** 728 900 Bracket for 13 box spanners 102 x 650 x 53 mm 728 901 Bracket for 13 spanners 162 x 364 x 44 mm Bracket for 20 drive sockets 670 x 46 x 50 mm 728 902 728 903 Bracket for 12 allen keys 166 x 35 x 24 mm 728 904 Bracket for 11 sets of pliers-screwdrivers - files 206 x 32 x 27 mm 728 905 Bracket for 6 screwdrivers 235 x 41 x 35 mm Bracket for 18 bits - punches - chisels 728 906 100 x 83 x 47 mm 728 907 Universal "multi-tool" bracket 235 x 67 x 87 mm Small "multi-tool" bracket 728 909 72 x 67 x 87 mm 728 910 Set of drill brackets 60 x 45 x 100 mm 728 924 800 x 40 x 100 mm Tray for panel - cabinet 289 400 Paper roll supports 728 911 Nut and bolt set for bench assembly





HOOKS FOR PERFORATED PANELS

289 108 short hooks set (15 units) Length: 21 mm. Screws included. 289 107 long hooks set (15 units) Length: 32 mm. Screws included. 289 106 extra long hooks set (15 units) Length: 75 mm. Screws included.

289 110 short hooks set (5 units)

Length: 21 mm. Screws included.

289 111 long hooks set (5 units) Length: 32 mm. Screws included.

289 112 extra long hooks set (5 units)

Length: 75 mm. Screws included.



PART No.	PAGE	PART No.	PAGE	PART No.	PAGE	PART No. PA	AGE
Grease nipples	100	021060		Grease filler pumps	101	Battery and air operated	
011060		021100		108000		hand held grease pumps	
011100		021140		108050		160000	
011140		021160		108100		167500	
011160		021220		108501		168600	
011220		021260		108503		175200	
011240		021280		100303	. 127	175300	
011260		021300		Oil suction guns		175400	
011280		021320		113700	. 132	176100	
011300	. 120	021340	. 121	113710	. 132	176200	132
011320	. 120	021380	. 121	113910	. 132	176300	132
011340		021500				179500	132
011500		021520		Grease connectors No	.zzels		
011520		021540		and valves		Spray, suction and blow	_
011540		021600		121000		184000	
011600		021620		121011		184050	
011620		021700		121020		184100	
011700		021740		121050		184200	
011740		022160		122011		184201	
011900		022220		123001		185001	
011910	. 120	022260	. 121	123011	. 125		
011930		022600		124011		Water and fluid guns	
011940	. 120	022620	. 121	126000	. 125	186000	133
011950	. 120	023220		126100		186300	57
012020		023600		126200			
012220		023620		126400		Spray and inflator guns	
013060		023640		126500		187000	
013100		024620		127090		188000	
013140		024640		127091		195000	
013180		025640		128003		199800	133
013220		031939		128004		Hand tyre pumps	
013240		031949		128005		208500	133
013260		031950		128033	. 124	208501	
013280	. 120	031960	. 121			208600	133
013300	. 120	032060	. 121	Nylon braid hoses pol	yamide	208601	133
013320		032160		coated		208700	
013340		032220		130021		208701	133
013500		032260		130031			
013520		032600		130041		Connection adaptors, air 239000 23	
013600		032740		139150		239000 23 239002	,
013620		032939		132130	. 120	239004 23	
013700		032949		Grease outlet hoses		23,001 23	, 5_
013720	. 120	032959	. 121	136021	. 126	Air treatment units	
013740	. 120	050001	. 120	136031	. 126	240000	134
013900		051060		136041		240200 32,	134
013910	. 120	051160		136051	. 126	240201 23, 32,	
015060		051220		136201		240300	
015100		051260		137021		240400	
015140		051600		137031		240500 23, 32,	
015160	. 120	052060	. 120 . 120	137041	. 126 . 126	241001 23, 241201 23, 32,	134 134
015180		052220		137201		241301	
015240		052260		140020		241401	
015260		052600		140030		241501 23, 32,	
015280	. 120			140040		242102	
015300	. 120	Lever action grease p	umps	140050	63, 126	242201	134
015320		100900			. 126	242302	
015340		100940		141020		242402	134
015500		101200		141030			
015520		101202		141040		Air hoses	124
015540	. 120	101211		141050	. 126 . 126	246006 23, 32, 246010 23, 32,	
015600		101240		141200	. 120		
015700		102390		Grease compressors		246015 23, 32, 246030	
015720		106200		150000	. 127	246060	
015740	. 120	106240		151100	. 127		134
015900	. 120			151102		246150	
015910	. 120			157000	. 127	247706 23,	134



PART No. PAG	PART No.	PAGE	PART No.	PAGE	PART No.	PAGE
247710				13		60
247715	306300		358120	13		61
Shop furniture	307900		Oil pump and hose	reel		59
280100 13	307901	129	brackets		365852	59
280200 13			360100	36		59
280300	307905		360102		365854	59
280320			360109		I I'	
280400			360111	52 . 52, 82	In-line meters for o	oii and fluids
280430			360114	,	366725	
280500			360115			62, 112
280510			360116			62
280520 13			360117	52	366850	62
280530 13			360118		366851	62
281200			360119		011	
281300			360120		Oil pump accessor	
281500				52		22
282100			360125			22
282101 14	317915		360126	52	367012	22
282200 13	317916	131	360127		367016	22
282201		131	360133			22
282300			360134			22
282301		122		. 52, 82		22
282400			360160	22		22
282500			360161			22
282501			360162		300701	
283100 13)		360163	52	Oil gun and hose	end meter
283200 13					accessories	
283201			Oil valves and oil b			63
283202			361000			63
283900			361110		369215 369216	63
284201			301200	37		63
285100			Oil hoses and pump	D		63
289100 14			connection kits			63
289101 14			362100	. 23, 32	369900	23
289105 13				. 23, 32		
289106 14			362102		Mobile oil dispens	
289107			362103			79 79
289110		129	362106		370300	/9
289111		nsers	362110		Waste oil suction u	ınit. 24 litres
289112	•		362115			97
289205 13		78	362300	23		
289206 13		78	362301	23	Waste oil drainers	s, 100 litres
289305			362303		372000	
289307			362305			104
289309			362400	22	11111	104
289400 14	327020		Pressure relief valv	es	372100 372200	
Hand operated transfer pum		//		22	372300	
300000		pumps			372400	
300006	for fluids		Oil control guns fo	r oil	372500	98
300007 13			363051		372600	96
300100			363075			
300101		42	363077		Waste oil drainers	
300200		numne	363078			99
300300		pullips	363082		373100	1 1 1 1 1 1 1
300301		14	364021		373200	
300598				112		95
300599 13	343000				373400	95
300401 13			Hose end meters for o		373500	
300500			365300		373600	97
300501			365601		Mobile all allers	200 li
302001			365602		Mobile oil dispense 376300	•
304509			365604		376610	
306100			365605		376750	
					•	



PART No.	PAGE	PART No.	PAGE	PART No.	PAGE	PART No.	PAGE
376751	Q1	404100	. 27	426243	. 75	Open reels, 501 series	
378110		405100	. 27	426262	. 85	501100	. 45
370110		407200	. 27	428200	. 74	501198	. 45
Air operated oil pum	p kits	409200	. 27	428243	. 74	501200	. 45
379000		Bung adaptors		428262	84	501298	. 45
379003		410000	31	120202	. 01	501300	
379100	. 101	410001		Grease pump kits		501398	
379300	. 18	410002	. 31	429800	. 30		
379400				429810	. 30	Enclosed reels, 502 se	ries
379403		In-line grease meters		429900	. 30	502101	. 46
379404		411100	. 62			502104	
379500				Drum trolleys		502198	
379503		Grease hoses and pum	ıp	430000		502199	
379710		connection kits	. 32	430800		502201	
379711		412101		431000		502298	
379900		412102		432000		502299	
379910		412104		432814	,	502301	
379920	. 21	412106			. 02	502304	
		412108		Special waste oil recei	vers	502398	
Oil management and		412110	. 32	435000	. 100	502399	. 46
inventory control sys		412112	. 32	436000	. 100	502400	. 46
380550		412115	. 32	436100		502499	. 46
380551		412190		439100	. 100		
381000		412391				Open reels, 504 series	
381001		412392	. 32	Lubrication benches	00	504100	
381002		Crosso control guns		450000		504199	
381060		Grease control guns 413077	. 58	450010	. 90	504200	
381102		413080		Field service units		504300	• • • • • • • • • • • • • • • • • • • •
381150	. 70	413081		450200	. 91	504301	
381200	. 66	413082		451000		504399	
381300	66, 70			452000	. 91	504400	. 47
381500		Grease swivels				504499	. 47
381501		414100		Grease pump and reel			
381550		414200		packages		Open reels, 505 series	
381600		414300	. 63	453602		505010	
381700				453603	. 85	505200	
381904		Hose end meters for g		Oil pump packages		505201	
381905		415002		454002	. 86	505298	
381910		413002	. 01	454003		303277	. 40
381911	. 66	Follower plates		454009		Open reels - 506 serie	S
381912	. 66	417001	. 31	454010	. 86	506101	. 50
381913		417002	. 31	454100	. 87	506121	. 50
381950		417003			. 87	506122	. 50
381951		417004		454111		506202	
381953		417005		454150			. 50
382001		417006	. 31		. 88	506222	. 50
	. 69	Drum covors			. 88 . 88	506300	
382012		Drum covers 418002	. 31		. 88 . 88	506301	
382050		418004			. 88		. 50
382100	. 69	418006		151101	. 89		. 50
382110	. 69	418013	. 31	454695	. 89		50, 105
382115		418016	. 31	454697	. 89	506602	. 50
382120		418026	. 31	454699	. 89	506603	. 105
389001	. 68, 70					506622	. 50
Masta all sustian sust		Mobile greasers		Mobile cabinets		506912	
Waste oil suction syst	tems,	423150		480021		506920	
393100	. 103	424060			. 82 . 76		. 50 . 50
393100		424061		482200		506924	
399304		424152		105000	. 82	506934	. 50
399322		424170		485120			. 50
		424170.030		10 1000	. 76	506936	
Air operated grease p	oumps	424172			. 76	506942	
401000		424172.030	. 72			506950	. 50
401025		425150		Compact air reels		506960	. 50
402000		425150.006		500115			. 50
402025		425290		500116	. 51		. 53
402050	. 20	426200	. 75			511150	. 53



PART No. PA	AGE PART No.	PAGE PA	ART No.	PAGE	PART No.	PAGE
511200	53 561210	115 68	34461	. 108 . 108	Waste oil suction wand connectors and access 737946	ories . 101
511300	53 561310	115 68	34530	. 108	737947	. 101
512103	53 561611		34540		737949	. 101
512200	53 561614	116 2 3	30 V, 50 Hz AC diesel		737953	. 101
512255	53	68	35712	. 111	737955	. 101
513154	53 562000	117 68	35715	. 111	737959	. 101
513155			35716 35720		737967	
513259			35721		737974	. 105
513350			35730 35731		741300	
515210	53 562206	118 68	35741		741306	. 63
515213			35750 35751		741602	
515215	53 Pulse meters	68	35771		743799	
515216			iesel No.zzles		Accessories	
516121	54	68	38001	. 112	836404	. 63
516122			38300	. 112	836504	. 62
516151	54	Di	iesel pump accessorie	es	Connection adapters,	oil and
516152			39021 39022		grease 945513	2 104
516212			39030		945516	
516213			39031		945548	
516215			39036		945551	,
516222			39037	. 112	945554	,
516242			rease outlet stems		945555	
516262			10214 10215		945557	
516282			10215 10297		945565	
516292			10298		945572	
516300			10659 10710		945590	,
516602		132			945592	23, 31
516622	54 629002		low gun extension tu 18229		945593	
DirectFlo diaphragm pum			f		945681	. 23
551010			nop furniture accesso 28900		Shut off valves	
552011			28901		950300	
552014			28902 28903		950302	•
552016			28904		950304	. 32
552021			28905 28906		950306	
557011	81 675001	132 72	28907	. 140	950312	. 23
557012			28909 28910		950317	
	675005	132 72	28911	. 140	950319	23, 32
12 & 24 V DC oil pumps 561012		131 72 132	28924	. 140	950320	
561013	113 679001	132 Ac	ccessories		950352	. 104
561014			30603 36349		950353	. 104
561025	113 In-line meters for o	diesel 73	36353	. 66	Y strainers	
561026			36377 36502		950370	
230 & 380 V AC oil pumps	s	73	36511	. 63	7505/1	. 23
561100			36522 36601			
561110		109		. 03		
561200	114 684460	109				