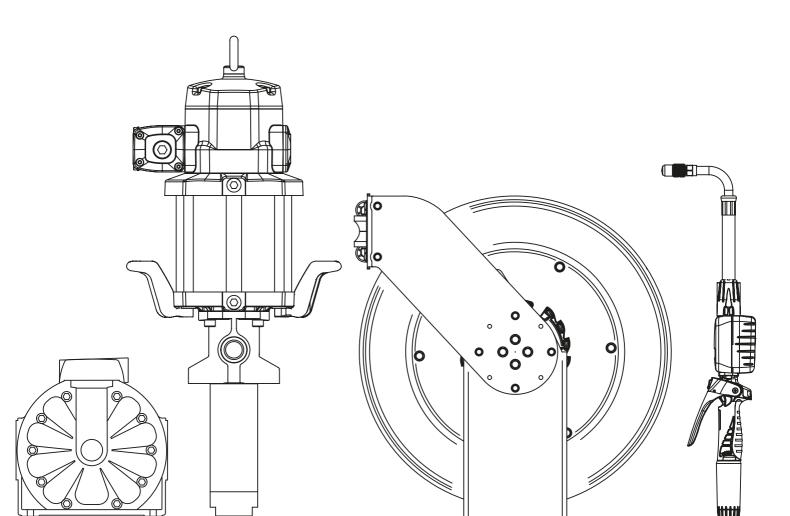


PRODUCT CATALOGUE

LUBRICATION AND FLUID HANDLING • SYSTEMS AND COMPONENTS





Headquarters Offices and Technical Centre in Gijón (Spain)

SAMOA QUALITY AND LEADERSHIP

FLUID HANDLING TECHNOLOGY

SAMOA, a privately owned company, is a leading European manufacturer of Lubrication and Fluid Handling Equipment. SAMOA products are used for transfer, dispensing, dosing and recovery. SAMOA designs and manufactures a wide program that includes air operated piston and diaphragm pumps, volume flow meters, delivery guns, electronic components for inventory control systems, hose reels, hand pumps and accessories.

PRODUCT DEVELOPMENT

Product research and development is a fundamental part of SAMOA's philosophy. We are in permanent contact with the market to identify new customer needs, that we satisfy with product improvements and new products.

MANUFACTURING

SAMOA's headquarters have been in Gijón, on the Spanish North Coast, for over 55 years. SAMOA's manufacturing facilities are modern and are equipped with the latest state-of-the art production equipment and technology. We are committed to design and manufacturing excellence, environmental sustainability and a healthy and safe workplace; our work processes and facilities are consequently ISO 9001, ISO 14001 and OHSAS 18001 certified.

DISTRIBUTION

Our products are available through a network of knowledgeable distributors and owned Distribution Companies. This global network provides a sales and consulting service, to identify the products that best meet each customer's needs and, when required, offers after sales service to ensure the long and satisfactory use of our equipment.

GLOBALLY COMPETITIVE

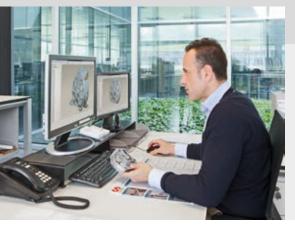
Our continuous product improvement process ensures that our products meet customer requirements worldwide, including in even the most demanding applications and environments. As a result, we are proud to say that SAMOA products are reliably working away, night and day, in more than 100 countries.





Research & Development and Manufacturing facility in Gijón (Spain)





SAMOA QUALITY AND LEADERSHIP





SAMOA's R&D Department is at the cutting edge of Lubrication Equipment and Fluid Handling product developments program with innovative technology concepts.

PRODUCT DESIGN & ENGINEERING

Product designs are created and rough product engineering is ensured by using 3D CAD. CAD-CAM manufacturing equipment dedicated to prototyping and a well equipped test laboratory, allow fast product evolution and the release to market of optimized and fully proven products.

STATE OF THE ART MANUFACTURING

High volume CNC manufacturing equipment is fed by robots. The robotized material handling processes incorporate part cleaning and 100% automated part inspection.

Sheet metal processing is also highly automated and it includes welding robots, laser cutting and CNC bending machines among others.





Once components are manufactured and passed inspection procedures, they are finished before they are assembled into final products.

Products are polyester powder coated, zinc or nickel plated depending on their functionality and finishing requirements.







UNWAVERING COMMITMENT TO QUALITY

Components are inspected during their manufacturing process following SPC standard and many sub-assemblies are 100% functionally tested. Many products, including all air operated pumps and meters, are run wet and taken through a carefully defined test procedure to ensure zero defects on shipment.

RAPID AND RELIABLE ORDER FULFILLMENT

SAMOA's experienced customer service staff and worldwide distributors can recommend the Lubrication Equipment System that best meets each application's need.

A generous inventory of finished products and parts allows short delivery times. High rotation products are stored in an automated warehouse integrated with the ERP system.

Prompt after-sales service and inmediate spare parts availability ensure a long and trouble-free product life.



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AIR OPERATED OIL PUMPS

t all starts with the pump; the heart of the system. The choice of a pump requires considering a wide variety of factors 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 containers of different sizes and bulk storage tanks; covering applications that range 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 gun is opened, the fluid pressure drops in the system, the pump automatically starts and oil flows. When the dispense gun is closed, back pressure is created in the system. When the fluid back pressure force acting on the pump piston equals the force of the compressed air pushing on the pump air piston, the system stops or stalls. When using other power sources, such as electric or hydraulic, the pump must have pressure sensing switches, bypass loops and relief valves, for controlling the motor and pressure.

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. The maximum pressure at the pump outlet that the pump is able to develop is determined multiplying the air inlet pressure by the pump pressure ratio. Fluid pressure is required to get the oil from the pump to the furthest dispense point. Restrictions such as the pipe length and diameter, hoses, hose reels, solenoid valves, pulse meters, control handles, and other system components create friction in the system. Sufficient fluid pressure is needed to overcome this friction, in order to get the required volume of oil to each 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 has to be considered to choose the pump size for your system. How many dispense points will be operating simultaneously? What kind of work will you be doing; filling a crankcase or filling a hydraulic reservoir?, what is the effective delivery required?, etc.



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





PUMP MASTER 45 - 3:1	PUMP MASTER 45 - 6:1	PUMP MASTER 45 - 10:1	PUMP MASTER 60 - 6:1	PUMP MASTER 60 - 12:1
Intensive Duty Volume Transfer Pump	Intensive Duty High Flow Pump	Intensive Duty Pressure Flow Pump	Intensive Duty High Delivery Pump	Intensive Duty High Performance Pump
3 to 4	3 to 4	3 to 4	3 to 4	3 to 4
75 m - 245'	160 m - 525'	240 m - 790'	160 m - 525'	250 m - 220'
Construction equipment Mining equipment Large fleets Railroad and mass transit vehicles Marine In-plant oil distribution	Large auto and truck dealers Construction equipment Mining equipment Railroad and mass transit vehicles Large fleets Lube trucks Marine In-plant oil distribution	Large auto and truck dealers Construction equipment Mining equipment Railroad and mass transit vehicles Large fleets Lube trucks Marine In-plant oil distribution	Very large auto and truck dealers Construction equipment Mining equipment Large fleets Railroad and mass transit vehicles Marine In-plant oil distribution	Very large auto and truck dealers Construction equipment Mining equipment Large fleets Railroad and mass transit vehicles Marine In-plant oil distribution

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



2 SAMOA

PUMPMASTER 2 - 1:1 PRESSURE RATIO PUMPS AND PACKAGES

UTILITY TRANSFER PUMPS

Air operated low pressure pumps for transferring lubricants. Pumps include height adjustable bung adaptor 2" BSP (M) for tank or drum bung mounting.

FLUIDS HANDLED

- Synthetic and mineral based lubricants.
- Transmission fluid.
- Hydraulic oil.
- Diesel.

MARKETS SERVED

- Service shops.
- In plant oil transfer. • Agriculture.
- Marine.

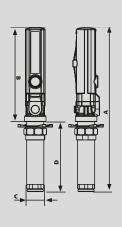
MODELS							
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.			
Universal stub pump	215 mm	500 mm	2,5 kg	351 120			
60 I (16 gal) drum bung mounted	725 mm	1.010 mm	4,8 kg	356 120			
205 I (55 gal) drum bung mounted	915 mm	1.200 mm	5,4 kg	352 120			

TECHNICAL DATA PRESSURE RATIO 1:1

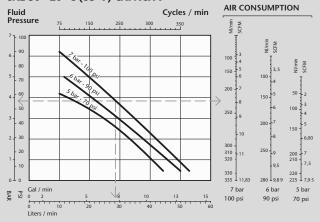
Air pressure operating range	1,5 - 10 bar (20 to 140 psi)
Air consumption (1)	150 NL/min (5.3 cfm)
Maximum fluid outlet pressure	10 bar (140 psi)
Air motor diameter	51 mm (2")
Air motor effective diameter	35 mm (1.4")
Air motor stroke	75 mm (3")
Delivery at 150 cpm	20 l/min (5.3 US gpm)
Maximum free flow delivery (2)	52 l/min (13,7 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	Aluminium / Steel / NBR / Acetal / Polyurethane
Noise level (3)	80 dB

(1) Air consumption with 6 bar air inlet pressure and 150 cycles per minute.
 (2) Maximum free delivery at 7 bar.
 (3) Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

DIMENSIONS (mm)							
MODEL	351 120	356 120	352 120				
A (mm)	500	1.010	1.200				
B (mm)	285	285	285				
C (mm)	52	52	52				
D (mm)	215	725	915				



SAE 30 - 20 °C (68 °F) CAPACITY





PUMPMASTER 2 - 1:1 PRESSURE RATIO PUMPS AND PACKAGES

PUMPMASTER 2 - 1:1 PUMP PACKAGES FOR 205 LITRE DRUMS

Packages with air operated low pressure transfer pump. The pump is designed to fit through the 2" bung opening on 50 and 205 I oil drums or to be mounted on a lid for open drums. The pump is fixed using a height adjustable bung adapter.

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, buckets, auxiliary tanks, etc., without the risk of lubricant contamination.

An air valve or an optional pressure regulator allows the user to adjust the pump speed and 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.

4	54 002		454 003		45	4 010	454	009
PART No.	DESCRIPT			PUMP	HOSE 3 m x 3/4"	DELIVERY GUN	AIR INLET ACCESSORY	APPROX. DELIVERY
454 002	1:1 high volume trans	тег раскаде	205 I DRUMS	352 120	3 m x 3/4" 362 303	High delivery nozzle 361 000	Needle air valve 950 302	30 l/min ⁽¹⁾

454 003	1:1 transfer package	205 I DRUMS	352 120	3 m x 1/2" 362 103	Oil control gun 363 115	-	15 l/min ⁽¹⁾
454 010	1:1 transfer package, metered	205 I DRUMS	352 120	3 m x 1/2" 362 103	Hose end meter 365 535	-	10 l/min ⁽¹⁾
454 009 ⁽³⁾	1:1 grease transfer package	185 kg DRUMS	352 120	3 m x 3/4" 362 303	Ball valve with angled nozzle	Needle air valve 950 302	3,2 kg/min ⁽²⁾

(1) Delivery with SAE30 oil at 7 bar inlet pressure and 20 °C temperature.
(2) Delivery with NLGI2 grease at 7 bar inlet pressure and 20 °C temperature.
(3) Model 454 009 also includes drum cover PN 418 006 and follower plate PN 417 004 for 185 kg grease drums.

Not included options:

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 PUMPS, PACKAGES AND KITS

UTILITY MEDIUM PRESSURE PUMPS

Air operated medium pressure pumps for dispensing lubricants from mobile units, oil distribution packages and small systems that do not include simultaneous operation outlets. Pumps include height adjustable bung adaptor 2" BSP (M) for tank or drum bung mounting.

FLUIDS HANDLED

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

MARKETS SERVED

- Auto dealers.
- Service shops.
- Fast lube centres.
- Agriculture.
- Marine.

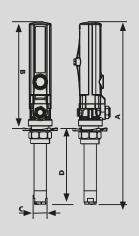
MODELS							
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.			
Universal stub pump	200 mm	495 mm	2 kg	353 120			
60 I (16 gal) drum bung mounted	700 mm	995 mm	3 kg	358 120			
205 I (55 gal) drum bung mounted	905 mm	1.200 mm	3,5 kg	354 120			

TECHNICAL DATA PRESSURE RATIO 3:1

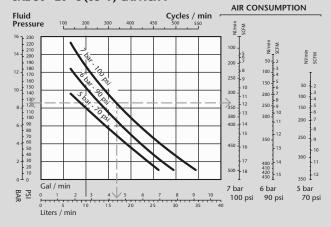
Air pressure operating range	1,5 - 10 bar (20 to 140 psi)
Air consumption (1)	180 NL/min (6.4 cfm)
Maximum fluid outlet pressure	30 bar (420 psi)
Air motor diameter	51 mm (2")
Air motor effective diameter	35 mm (1.4")
Air motor stroke	75 mm (3")
Delivery at 200 cpm	10 l/min (2.7 US gpm)
Maximum free flow delivery (2)	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	Aluminium / Steel / NBR / PTFE
Noise level (3)	80 dB

Air consumption with 6 bar air inlet pressure and 200 cycles per minute.
 Maximum free delivery at 7 bar.
 Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

DIMENSIONS (mm)							
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				



SAE 30 - 20 °C (68 °F) CAPACITY



Product specifications are subject to change without prior notice



PUMPMASTER 2 - 3:1 PRESSURE RATIO PUMPS, PACKAGES AND KITS

Lubricant dispensing and transfer require more than a bare pump. SAMOA offers a range of pump packages and installation kits that include all the accessories needed to efficiently dispense or transfer lubricants. Packages and kits can be used with 205 liter oil drums, 1.000 I IBCs and tanks. They provide an easy solution to common applications.



PUMPMASTER 2 - 3:1 OIL PUMP PACKAGES

PART No.	DESCRIPTION	APPLICATION	PUMP	HOSE	DELIVERY GUN	APPROX. DELIVERY
454 110	3:1 transfer metered package	205 l drums	354 120	3 m x 1/2" (362 103)	Hose end meter 365 535	12 l/min ⁽¹⁾
454 111	3:1 transfer package	205 l drums	354 120	3 m x 1/2" (362 103)	Oil control gun 363 115	15 l/min ⁽¹⁾
454 100	Transfer pump with spigot valve	205 l drums	352 220 ⁽³⁾	-	Oil spigot valve 361 100 and tray 736 462	23 l/min ⁽¹⁾
454 150	3:1 transfer pump + IBC side bracket ⁽²⁾	1.000 IBC	353 120	6 m x 1/2" (362 106)	Hose end meter 365 535	12 l/min ⁽¹⁾

(1) Delivery with SAE 30 oil at 7 bar inlet pressure and 20 °C room temperature.

(2) Includes suction hose 745 304 with elbow and connection accessories.
 (3) 2:1 pressure ratio pump.







379 000



PUMPMASTER 2 - 3:1 OIL PUMP KITS

	PUMPMASTER 2 TANK MOUNTED PUMP KIT	PUMPMASTER 2 WALL MOUNTED PUMP KIT	PUMPMASTER 2 DRUM BUNG MOUNTED PUMP KIT
PART No.	379 003	379 000	379 300
APPLICATION	Tanks	205 l drums	205 l drums
PUMP	353 120	353 120	354 120
SUCTION KIT	1.400 mm suction tube 368 104	367 102	
HOSE CONNECTION KIT	362 910	362 910	362 910

PUMP PACKAGE AND KIT ACCESSORIES

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).

609 007: Pressure relief valve, 1/4" BSP (M) - 60 bar approx. opening pressure. When mounted to the pump body, prevents damage in the system caused by over pressure produced by thermal expansion (1 °C increase in temperature can cause up to 10 bar increase in the system pressure). 950 300: 1/2" BSP (FF) ball valve.

PUMPMASTER 2 - 3:1 PRESSURE RATIO PUMPS, PACKAGES AND MOBILE UNITS



PUMPMASTER 2 - 3:1 OIL PUMP PACKAGES

PART No.	APPLICATION	PUMP	HOSE END METER	HOSE REEL	PUMP CONNECTION KIT	SUCTION KIT	PUMP BRACKET	DRIP POCKET
454 605	205 l drum, drum mounted	354 120	365 535	506 202	362 910	-	-	-
454 600	205 l drum, drum mounted	354 120	365 535	501 200	362 910	-	-	-
454 651	205 I drum, wall mounted	353 120	365 535	506 202	362 910	367 000	360 102	360 127
454 653	205 l drum, wall mounted	353 120	365 535	501 200	362 910	367 000	360 102	360 127
454 659	205 l drum, wall mounted	353 120	365 535	507 202	362 910	367 000	360 102	360 127
454 694	1.000 l IBC, IBC top mounted	353120	365 535	506 202	-	745 300 + 745 301 + 945 572	360 102 + 360 106	-
454 695	1.000 IBC, IBC top mounted	353 120	365 535	501 200	-	745 300 + 745 301 + 945 572	360 102 + 360 106	-
454 699	1.000 IBC, IBC side mounted	353 120	365 535	506 202	-	745 301 + 745 302 + 945 572	360 102 + 360 107	-
454 697	1.000 IBC, IBC side mounted	353 120	365 535	501 200	-	745 301 + 745 302 + 945 572	360 102 + 360 107	-

376 300 - 378 120



MOBILE UNITS WITH PUMPMASTER 3:1 OIL PUMP

PART No.	APPLICATION	PUMP	HOSE END METER	DELIVERY HOSE	TROLLEY	OTHER ACCESSORIES
370 400	50 l drum	358 120	365 535	3 m x 1/2" 362 103	431 000	Drum cover 418 010
328 010	Self contained, 70 l	358 120	365 535	3 m x 1/2" 362 103	373 310	Self contained 70 l tank
376 300	205 l drum	354 120	365 535	3 m x 1/2" 362 103	432 000	-
376 610	205 l drum	353 120	365 535	3 m x 1/2" 362 103	432 814	Suction hose 367 011
378 120	205 l drum	353 120	365 535	10 m hose reel 506 202	432 814	Suction hose 367 011





PUMPMASTER 2 ACCESSORIES OTHER MOBILE OIL DISPENSERS

PUMPMASTER 2 ACCESSORIES 360 102 360 120 367 000 367 011 369 910 SUCTION ASSEMBLIES AND SUCTION HOSES **HOSE CONNECTION KIT** 360 102 Wall bracket Suction assemblies for wall mounted stub 362 910 PM2 pump connection kit pumps. Assemblies include Ø 42 suction tube 360 120 Floor bracket 1 m x 1/4" air hose 246 010. one 1/2" BSP with foot valve, height adjustable 2" bung adaptor and 2 m x 3/4" rubber connection hose. 360 001 367 000 Suction assembly for 1.000 I IBC and 205 I drums 1/4" BSP (M). 1.060 mm suction tube. 609 007 367 003 Suction assembly for tanks 1.600 mm suction tube. PRESSURE RELIEF VALVE 367 011 spring reinforced transparent **BUNG ADAPTORS 2" (M) CONNECTION** suction hose 609 007 Pressure relief valve FOR DRUM AND TANKS BUNG OPENINGS For 205 | drums and 1.000 | IBC. 3 m x 3/4". 360 000 Bung adaptor for PM2 3:1 pumps 367 012 spring reinforced transparent Pump tube o.d.: 34 mm. suction hose with foot valve For 205 | drums and 1.000 | IBC. 3 m x 3/4", 360 001 Bung adaptor for PM2 1:1 pumps includes foot valve. Pump tube o.d.: 52 mm. 367 102 Pump suction kit Includes suction assemble 367 000 and pump

OTHER MOBILE OIL DISPENSERS



PRESSURIZED LUBRICANT **DISPENSERS 25 LITERS**

Mobile unit for dispense viscous lubricants. Includes a 25 I container that must be pressurized using a tire inflator at maximum 7 bar (100 psi). Includes safety valve and 1,5 m delivery hose with oil gun.

324 000 Pressurized lubricant dispenser, 25 liters.

324 010 Pressurized lubricant dispenser, 25 liters with meter.



bracket 360 102

SELF CONTAINED AIR OPERATED LUBRICANT DISPENSER 25 LITERS

Mobile unit to dispense viscous lubricants. Includes a 25 I capacity tank, a 2:1 pneumatic pump, oil meter at pump outlet, 1,5 m delivery hose and oil gun with non-drip tip.

327 020 Self contained air operated lubricant dispenser with meter, 25 liters.



SELF CONTAINED HAND OPERATED LUBRICANT DISPENSERS 25 LITERS

Mobile unit to dispense viscous lubricants. Includes a 25 I capacity tank, a hand pump and a 1,5 m delivery hose with angled spout.

325 000 Self contained hand operated lubricant dispenser, 25 liters.

325 010 Self contained hand operated lubricant dispenser with meter, 25 liters. Includes in line meter at the pump outlet.

(M) x 1/4" BSP (M) connection adapter 945 516, 1 m x 1/2" oil hose with 1/2" BSP (MM) fittings, one automatic quick air coupling 1/4" BSP (F) 253114 and one quick air connector

1/4" BSP (M) 60 bar approx. opening pressure. When mounted to the pump body, prevents damage in the system caused by over pressure produced by thermal expansion (1°C increase in temperature can cause up to 10 bar increase in the system pressure). Possibility to connect either a 1/4" hose with a clamp or a hose with 1/8" BSP (F) fitting as return line to the tank or drum.



SELF CONTAINED HAND OPERATED LUBRICANT DISPENSERS 70 LITERS

Mobile unit to dispense viscous lubricants. Includes a 70 l capacity tank, a hand pump and a 1,5 m delivery hose with angled spout.

326 000 Self contained hand operated lubricant dispenser, 65 liters.

326 010 Self contained hand operated libricant dispenser with meter, 65 l Includes in line meter at the

pump outlet.

Product specifications are subject to change without prior notice





PUMPMASTER 4 - 3:1 PRESSURE RATIO PUMPS

STANDARD DUTY MEDIUM PRESSURE PUMPS

Air operated medium pressure and high volume pumps for dispensing lubricants in medium size installations, that include multiple outlets with simultaneous operation. Pumps include height adjustable bung adaptor 2" BSP (M) for drum and tank bung mounting and a built in port for connecting a pressure relief valve (PN 609 007).

FLUIDS HANDLED

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

MARKETS SERVED

- Vehicle maintenance centres and auto dealers.
- Fleet service.
 - Fast lube centres.
 - Lube trucks.
 - Mining and construction.
 - In-plant.

MODELS						
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.		
Universal stub pump	200 mm	585 mm	5,7 kg	340 120		
205 l (55 gal) drum bung mounted	910 mm	1.295 mm	7,7 kg	341 120		

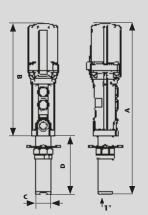
TECHNICAL DATA PRESSURE RATIO 3:1					
Air pressure operating range	1,5 - 10 bar (20 to 140 psi)				
Air consumption (1)	285 NL/min (10 cfm)				
Maximum fluid outlet pressure	30 bar (420 psi)				
Air motor diameter	88 mm (3.5")				
Air motor effective diameter	60 mm (2.4")				
Air motor stroke	100 mm (4")				
Delivery at 85 cpm	10 l/min (2.7 US gpm)				
Maximum free flow delivery (2)	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	Aluminium / Steel / Polyurethane / NBR / PTFE				
Noise level (3)	93 dB				

(1) Air consumption with 6 bar air inlet pressure and 10 l/min delivery.

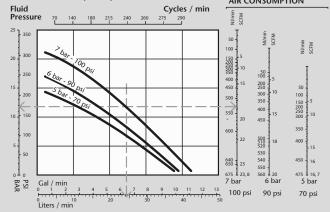
(2) Maximum free delivery at 7 bar.

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

DIMENSIONS (mm)					
MODEL	340 120	341 120			
A (mm)	585	1.295			
B (mm)	385	385			
C (mm)	52	52			
D (mm)	200	910			



SAE 30 - 20 °C (68 °F) CAPACITY



AIR CONSUMPTION



SAMOA

4

U.1

347 120

PUMPMASTER 4 - 5:1 PRESSURE RATIO PUMPS

STANDARD DUTY MEDIUM PRESSURE PUMPS

Air operated medium pressure pumps for dispensing lubricants in medium to large size installations, that include multiple outlets with simultaneous operation. Pumps include height adjustable bung adaptor 2" BSP (M) for drum and tank bung mounting and a built in port for connecting a pressure relief valve (PN 609 007).

FLUIDS HANDLED

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

MARKETS SERVED

- •Auto and truck dealers.
- Fleet service facilities.
- Mining and construction.
- Lube trucks.
- Marine.
- Railroad and mass transit vehicles.
- In-plant.

MODELS					
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.	
Universal stub pump	278 mm	663 mm	5,6 kg	347 120	
205 l (55 gal) drum bung mounted	915 mm	1.300 mm	7,4 kg	348 120	

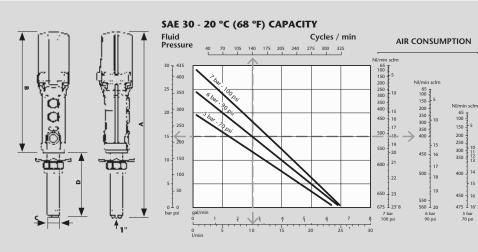
TECHNICAL	DATA PRESSURI	RATIO 5:1
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Air pressure operating range	1,5 - 10 bar (20 to 140 psi)
Air consumption (1)	400 NL/min (14 cfm)
Maximum fluid outlet pressure	50 bar (700 psi)
Air motor diameter	88 mm (3.5")
Air motor effective diameter	60 mm (2.4")
Air motor stroke	100 mm (4")
Delivery at 125 cpm	10 l/min (2.7 US gpm)
Maximum free flow delivery (2)	25 l/min (6.6 US gpm)
Air inlet	3/8" NPSM
Fluid inlet (short pump only)	1" BSP
Fluid outlet	3/4" NPSM
Wetted and seal materials	Aluminium / Steel / Polyurethane / NBR / PTFE
Noise level (3)	95 dB

Air consumption with 6 bar air inlet pressure and 10 l/min delivery.
 Maximum free delivery at 7 bar.

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

DIMENSIONS (mm)					
MODEL	347 120	348 120			
A (mm)	663	1.300			
B (mm)	385	385			
C (mm)	42	42			
D (mm)	278	915			



14





PUMPMASTER 4 - 8:1 PRESSURE RATIO PUMPS

STANDARD DUTY HIGH PRESSURE PUMP

Air operated high pressure pumps for dispensing lubricants in applications requiring higher pressure and moderate flow rates, such as medium to large size installations including multiple outlets with no simultaneous use. Pumps include height adjustable bung adaptor 2" BSP (M) for drum or tank bung mounting and a built in port for connecting a pressure relief valve (PN 609 007).

FLUIDS HANDLED

- Synthetic and mineral based lubricants.
- Hydraulic oil.
- Gear oil.
- Transmission fluid.
- Corrosion protection fluids.

MARKETS SERVED

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

MODELS						
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.		
Universal stub pump	242 mm	627 mm	5,7 kg	349 120		
205 l (55 gal) drum bung mounted	932 mm	1.317 mm	7,4 kg	349 121		

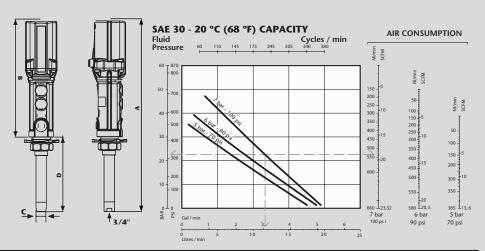
TECHNICAL DATA PRESSURE RATIO 8:1

Air pressure operating range	3 -10 bar (40 to 140 psi)
Air consumption (1)	450 NL/min (16 cfm)
Maximum fluid outlet pressure	80 bar (1,120 psi)
Air motor diameter	88 mm (3.5")
Air motor effective diameter	60 mm (2.4")
Air motor stroke	100 mm (4")
Delivery at 200 cpm	10 l/min (2.7 US gpm)
Maximum free flow delivery (2)	22 l/min (5.8 US gpm)
Air inlet	3/8" BSP (F)
Fluid inlet (short pump only)	3/4" BSP (F)
Fluid outlet	3/4" BSP (F)
Wetted and seal materials	Aluminium / Steel / NBR / PTFE
Noise level (3)	95 dB

(1) Air consumption with 6 bar air inlet pressure and 10 l/min delivery.

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

DIMENSIONS (mm)					
MODEL	349 120	349 121			
A (mm)	627	1.317			
B (mm)	385	385			
C (mm)	34	34			
D (mm)	242	932			





PUMPMASTER 4 - 3:1 AND 5:1 PUMPS INSTALLATION KITS AND ACCESSORIES

Installing an oil pump in a distribution system requires more than a bare pump. SAMOA offers a range of installation kits that include all the accessories needed to efficiently dispense or transfer lubricants. Kits can be used with 205 liter oil drums, 1.000 liter IBCs and tanks and they provide an easy solution to common applications.



	TANK MOUNT	ED PUMP KIT	WALL MOUNT	ED PUMP KIT	205 I DRUM MO	JNTED PUMP KIT
PUMP RATIO	PM4 - 3:1	PM4 - 5:1	PM4 - 3:1	PM4 - 5:1	PM4 - 3:1	PM4 - 5:1
KIT PART NUMBER	379 403	379 503	379 400	379 500	379 404	379 504
PUMP	340 120	347 120	340 120	347 120	341 120	348 120
SUCTION KIT	368 105 1.400 mm suction tube	368 105 1.400 mm suction tube	367 105	367 105	-	-
HOSE CONNECTION KIT	362 911	362 911	362 911	362 911	362 911	362 911

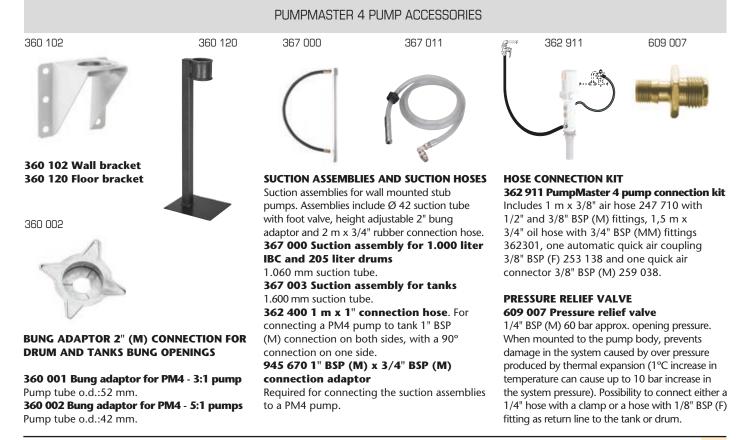
PUMP KIT ACCESSORIES

239 004: 1/2" BSP (MM) connection adaptor

241 201: Air pressure regulator, 0-12 bar, 3/8" BSP (F) - 1/2" BSP (F)

241 501: Air filter and pressure regulator, 0-12 bar, 3/8" BSP (F) - 1/2" BSP (F)

609 007: Pressure relief valve, 1/4" BSP (M) - 60 bar approx. opening pressure. When mounted to the pump body, prevents damage in the system caused by over pressure produced by thermal expansion (1 °C increase in temperature can cause up to 10 bar increase in the system pressure).
 950 303: 3/4" BSP (FF) ball valve.



Product specifications are subject to change without prior notice

INTENSIVE DUTY PISTON PUMPS: THE HEART OF A LUBRICATION SYSTEM

SAMOA Intensive Duty pumps are designed to deliver through long distribution lines even with multiple outlets with simultaneous operation all kind of synthetic and petroleum based lubricants at continuous-duty and high flow rates under extreme and intensive working conditions.

These double acting, high efficiency, air powered, positive displacement piston, pumps provide the necessary confidence to offer a solution for fast moving large volumes of oil in very large distance applications.

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

NASTER

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

Modular design: Tough modular pump design allows multiple combination assemblies of air motor and lower pump end. This versatile pump construction, for easy service and maintenance, provides a comprehensive range of operating output pressures and flowrates to meet any lubricant volume delivery required to each application.

Integral in-line design: The anti-corrosive, hardened plunger and the integral in-line configuration that aligns the air motor and the plunger rod and piston assembly, are designed for low-friction, to minimize the wear and maximize tightness and seals life.

High quality materials: Aluminium die-cast pneumatic air motor with hard anodized aluminium cylinder; light weight drive piston; stainless steel trip rod assembly; polyurethane seals and piston packing; cast iron pump outlet body; thick wall polished steel tube; high tensile hard chrome plated steel fluid plunger rod and piston and inlet valves seats made of hardened steel.

PM 45 - 06 MS (536 630)

• **Stub / Universal Pumps:** Double valve stub style pump tube used for positive priming and pumping all grades of oil. Rigid or flexible suction extensions screw directly onto the pump foot valve, allowing the pump to accommodate to different size oil containers.





PUMPMASTER 45 - 3:1 PRESSURE RATIO PUMP

INTENSIVE DUTY VOLUME TRANSFER PUMP

Air operated medium pressure and high delivery pump for large volume transfer applications.

FLUIDS HANDLED

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

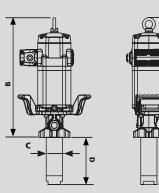
- **MARKETS SERVED**
- Construction equipment.
- Mining equipment.
- Large fleets.
- Railroad and mass transit vehicles maintenance.
- Marine.
- In plant oil distribution and transfer.

	MODELS	;		
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.
Universal stub pump	200 mm	702 mm	17 kg	536 330

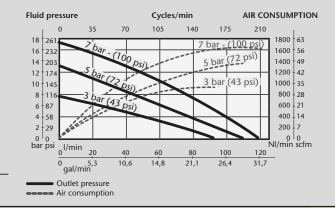
TECHNICAL DATA	PRESSURE RATIO 3:1
Air pressure operating range	1,5 to 12 bar (20 to 170 psi)
Air consumption (1)	800 NI/min (28 cfm)
Maximum fluid outlet pressure	36 bar (510 psi)
Air motor effective diameter	115 mm (4 1/2")
Air motor stroke	100 mm (4")
Delivery at 80 cpm	45 l/min (11.88 gal/min)
Maximum free flow delivery	120 l/min (31.70 gal/min)
Air inlet	1/2" BSP (F)
Fluid inlet	1 1/2" BSP (F)
Fluid outlet	3/4" BSP (F)
Wetted and seal materials	Cast iron / Nickel / Aluminium / Steel / Polyurethane / NBR
Noise level (2)	80 dB

Maximum air consumption with 5 bar air inlet pressure and 80 cpm.
 Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

DIMENSI	DIMENSIONS (mm)				
MODEL	536 330				
A (mm)	702				
B (mm)	502				
C (mm)	90				
D (mm)	200				



SAE 10, 21 °C (70 °F) CAPACITY







INTENSIVE DUTY HIGH FLOW PUMP

Air operated medium pressure and high delivery pump for large system with simultaneous operation outlets that require a high delivery pump.

PRODUCTS HANDLED

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

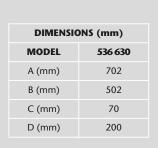
MARKETS

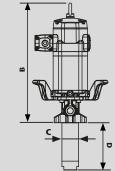
- Large auto and truck dealers.
- Construction equipment maintenance. • Mining equipment maintenance.
- Large fleets.
- Railroad and mass transit vehicles maintenance. • Marine.
- In plant oil distribution.

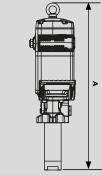
MODELS						
APPLICATION	PUMP TUBE HEIGHT	E	TOTAL HEIGHT	WEIGHT	PART No.	
Universal stub pump	200 mm		702 mm	17 kg	536 630	
TE	CHNICAL DATA	PRESS	URE RATIO 6:1			
Air pressure operating range		1,5 to	12 bar (20 to 170 ps	i)		
Air consumption (1)		830 N	ll/min (29 cfm)			

Air pressure operating range	1,5 to 12 bar (20 to 170 psi)
Air consumption (1)	830 NI/min (29 cfm)
Maximum fluid outlet pressure	72 bar (1,020 psi)
Air motor effective diameter	115 mm (4 1/2")
Air motor stroke	100 mm (4")
Delivery at 80 cpm	25 l/min (6.60 gal/min)
Maximum free flow delivery	95 l/min (25.09 gal/min)
Air inlet	1/2" BSP (F)
Fluid inlet	1 1/2" BSP (F)
Fluid outlet	3/4" BSP (F)
Wetted and seal materials	Cast iron / Hard chromed steel / Steel / Polyurethane / NBR
Noise level (2)	80 dB

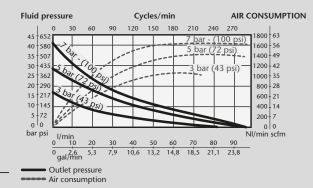
Maximum air consumption with 5 bar air inlet pressure and 80 cpm.
 Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.







SAE 10, 21 °C (70 °F) CAPACITY



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INTENSIVE DUTY PRESSURE FLOW PUMPS

Air operated moderate pressure pump for very large oil systems or when a low air pressure or cold temperatures would limit pump performance.

PRODUCTS HANDLED

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

MARKETS

- Large auto and truck dealers.
- Construction equipment maintenance.
- Mining equipment maintenance.
- Railroad and mass transit vehicles maintenance.
- Large fleets.
- Lube trucks.Marine.
- In plant oil distribution.

MODELS					
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.	
Universal stub pump	200 mm	702 mm	16,5 kg	536 030	
205 I drum bung mounted	855 mm	1.357 mm	17 kg	536 010	

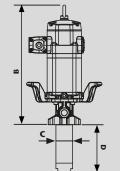
TECHNICAL DATA PRESSURE RATIO 10:1

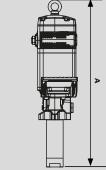
Air pressure operating range	1,5 to 12 bar (20 to 170 psi)
Air consumption (1)	850 Nl/min (30 cfm)
Maximum fluid outlet pressure	120 bar (1,700 psi)
Air motor effective diameter	115 mm (4 1/2")
Air motor stroke	100 mm (4")
Delivery at 80 cpm	15 l/min (4 gal/min)
Maximum free flow delivery	65 l/min (17.17 gal/min)
Air inlet	1/2 " BSP (F)
Fluid inlet	1 1/2 " BSP (F)
Fluid outlet	3/4" BSP (F)
Wetted and seal materials	Cast iron / Hard chromed steel / Steel / Polyurethane / NBR
Noise level (2)	80 dB

(1) Maximum air consumption with 5 bar air inlet pressure and 80 cpm.

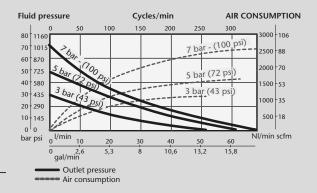
(2) Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

DIMENSIONS (mm)					
MODEL 536 030 536 010					
A (mm)	702	1.357			
B (mm)	502	502			
C (mm)	54	54			
D (mm)	200	855			





SAE 10, 21 °C (70 °F) CAPACITY







PUMPMASTER 60 - 6:1 PRESSURE RATIO PUMP

INTENSIVE DUTY HIGH DELIVERY PUMP

Air operated medium pressure and high delivery pump, for large installations with simultaneous operation outlets and applications that require large, constant delivery rates.

PRODUCTS HANDLED

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

MARKETS

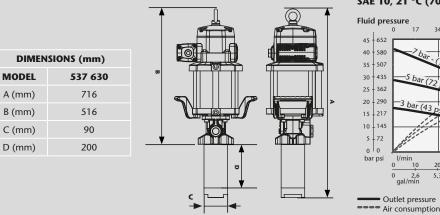
- Very large auto and truck dealers.
- Construction equipment maintenance.
- Mining equipment maintenance.
- Large fleets.
- Railroad and mass transit vehicles maintenance. • Marine.
- In plant oil distribution.

E TOTAL HEIGHT	WEIGHT	PART No.
716 mm	19 kg	537 630
	TOTAL HEIGHT	TOTAL HEIGHT WEIGHT

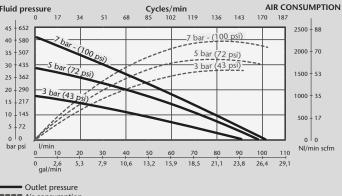
TECHNICAL DATA PRESSURE RATIO 6:1

Air pressure operating range	1,5 to 12 bar (20 to 170 psi)
Air consumption (1)	1.100 NI (39 cfm)
Maximum fluid outlet pressure	72 bar (1,020 psi)
Air motor effective diameter	150 mm (6")
Air motor stroke	100 mm (4")
Delivery at 60 cpm	35 l/min (9.25 gal/min)
Maximum free flow delivery	100 l/min (26.42 gal/min)
Air inlet	1/2 " BSP (F)
Fluid inlet	1 1/2" BSP (F)
Fluid outlet	3/4" BSP (F)
Wetted and seal materials	Cast iron / Aluminium / Nickel / Steel / Polyurethane / NBR
Noise level (2)	80 dB

Maximum air consumption with 5 bar air inlet pressure and 60 cpm.
 Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.



SAE 10, 21 °C (70 °F) CAPACITY







PUMPMASTER 60 - 12:1 PRESSURE RATIO PUMP

INTENSIVE DUTY HIGH PERFORMANCE PUMP

Air operated moderate pressure and high delivery for very large installation with simultaneous operation outlets or when low air pressure would limit pump performances.

PRODUCTS HANDLED

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

MARKETS

- Very large auto and truck dealers.
- Construction equipment maintenance.
- Mining equipment maintenance.
- Large fleets.
- Railroad and mass transit vehicles maintenance. Marine.
- In plant oil distribution.

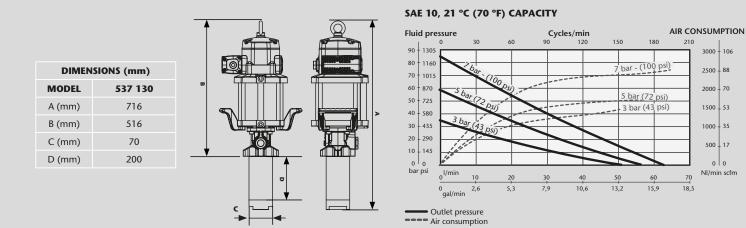
MODELS					
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.	
Universal stub pump	200 mm	716 mm	19 ka	537 130	

TECHNICAL DATA PRESSURE RATIO 12:1

1,5 to 12 bar (20 to 170 psi)
1.150 NI (41 cfm)
144 bar (2,040 psi)
150 mm (6")
100 mm (4")
20 l/min (5.30 gal/min)
65 l/min (17 gal/min)
1/2 " BSP (F)
1 1/2" BSP (F)
3/4" BSP (F)
Cast iron / Hard chromed steel / Steel / Polyurethane / NBR
80 dB

(1) Maximum air consumption with 5 bar air inlet pressure and 60 cpm.

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



539 009

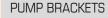
PUMPMASTER 45 AND 60 ACCESSORIES

HOSE CONNECTION KIT

539 009 Hose Connection kit for PM45 and PM60 oil pumps

Includes 1 m x 1/2" air hose (PN 248 018) with swivel elbow (PN 239 352), quick air coupler (PN 251 412), air nipple (PN 255 312), and 2 m x 3/4" oil hose (PN 362 302) with swivel elbow (PN 945 738).

360 132 - 360 121



360 132 Wall bracket. For PM45 and PM60 universal stub pumps. **360 121 Floor bracket**. For PM45 and PM60 universal stub pumps.

360 006

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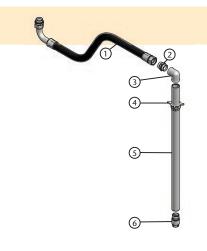
BUNG ADAPTOR

For use with PM45 10:1 pressure ratio pumps only

PM45 10:1 pumps are the only pumps with a 2" pump tube and therefore the only pumps that fit through 2" bung openings on drums and tanks. All other PM45 and PM60 pumps must be wall or floor mounted using an adequate bracket and suction accessories.

360 006 Bung adaptor

For PM45 10:1 pumps only.



SUCTION ACCESSORIES

367 016 Suction assembly for 205 l drums and IBCS It includes a 42 mm x 2 m suction tube with foot valve and 2 m x 3/4" hose. **For use with PM45 10:1 wall mounted universal stub pumps only.**

- (1) **362 402 Suction hose 1.800 mm x 1-1/2**" **rubber connection hose.** 1-1/2" BSP (F) connection elbow on one side and 1-1/2" (M) straight connection on the other.
- (2) 945 724 Connection adaptor, 1-1/2" BSP (MM).
- 3 945 737 Elbow, 1-1/2" BSP (FF).
- (4) **609 104 Bung adaptor** Adaptor for fixing tube 736 771 to a 2" bung opening.
- (5) **736 771 Suction tube** 1.000 x 1-1/2", 1-1/2" BSP (MF) connection threads.

⑥ 736 772 Foot valve

For use with suction tube 736 771.

609 007



PRESSURE RELEASE VALVES

Prevent damage caused by overpressure due to oil thermal expansion. **609 007 Pressure release valve.** Opening pressure approx. 60 bar. **609 008 Pressure release valve.** Opening pressure approx. 100 bar.



OIL PUMP ACCESSORIES

PUMP BRACKETS







PM2 AND PM4 PUMP BRACKETS 360 102 Wall bracket

360 120 Floor bracket

360 106 Bracket for fixing a pump and a hose reel on top of a 1.000 | IBC Requires pump bracket 360 102 (not included). 360 107 Bracket for fixing a pump and a hose reel laterally on a 1.000 l IBC

1/4" CONNECTION THREADS

1/4"BSP (FF)

240 200

240 500

240 400

Requires pump bracket 360 102 (not included). 360 108 Bracket for fixing a pump laterally on a 1.000 l IBC

Requires pump bracket 360 102 (not included).

PM45 AND PM60 PUMP BRACKETS 360 132 Wall bracket

360 121 Floor bracket

AIR ACCESSORIES

AIR PRESSURE REGULATOR 0 - 12 BAR

COMBINED AIR FILTER AND PRESSURE REGULATOR

AIR LUBRICATOR



240 200



241 501



950 303



Connection adapters

945 590, 1/4" BSP (MM) 945 592, 3/8" BSP (MM) 945 558, 1/2" BSP (MM) 945 551, 3/4" BSP (MM) 945 555, 1" BSP (MM) 945 724, 1 1/2" BSP (MM) 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) 945 567, 2" BSP (M) - 1 1/2" BSP (M) 945 565, 2" BSP (M) - 1" BSP (F) 945 513, 1 1/4" BSP (M) - 3/4" BSP (F) 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) 369 601, 1/2" BSP (MM) 45° elbow **945 572**, 3/4" BSP (MF) 90° elbow 945 548, 1/2" BSP (MM) 90° elbow

945 738, 3/4" BSP (M) - 3/4" BSP (F) 90° elbow Low and Medium pressure valves

3/4" CONNECTION THREADS

3/4" BSP (FF)

242 202

242 302

(Filter only)

242 402

950 305, 1/4" BSP (FF), 65 bar quarter turn valve 950 320, 3/8" BSP (FF), 65 bar guarter turn valve 950 300, 1/2" BSP (FF), 65 bar quarter turn valve 950 303, 3/4" BSP (FF), 40 bar quarter turn valve 950 306, 1" BSP (FF), 40 bar quarter turn valve 950 312, 1-1/2" BSP (FF), 25 bar quarter turn valve 950 308, 2" BSP (FF), 25 bar quarter turn valve

High pressure valves

1/2" CONNECTION THREADS 1/2" BSP (FF) with one 1/2" BSP (M) -

3/8" BSP (F) adaptor

241 201

241 501

241 401

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

Air line shutoff valves

950 302, Needle air valve 1/4" BSP (FF) **950 321**, Air valve 1/4" BSP (FF) 950 318, Air valve 3/8" BSP (FF) 950 319, Air valve 1/2" BSP (FF)

362 104

OIL HOSES



adaptors on both ends. **362 100**, 1 m x 1/2". Working pressure: 160 bar. Connection threads: 1/2" BSP (MM) 362 101, 1,5 m x 1/2". Working pressure: 160 bar. Connection threads: 1/2" BSP (MM) 362 102, 2 m x 1/2". Working pressure: 160 bar. Connection threads: 1/2" BSP (MM) 362 103, 3 m x 1/2". Working pressure: 160 bar. Connection threads: 1/2" BSP (MM) 362 104, 4 m x 1/2". Working pressure: 160 bar. Connection threads: 1/2" BSP (MM) 362 300, 1 m x 3/4". Working pressure: 100 bar. Connection threads: 3/4" BSP (MM) 362 301, 1,5 m x 3/4". Working pressure: 100 bar. Connection threads: 3/4" BSP (MM) 362 302, 1,8 m x 3/4". Working pressure: 100 bar. Connection threads: 3/4" BSP (MM) 362 303, 3 m x 3/4". Working pressure: 100 bar. Connection threads: 3/4" BSP (MM)

Manufactured in NBR with a steel reinforcement braid. With two swaged nuts and male-male

PUMP	PUMP MASTER 2	PUMP MASTER 2	PUMP MASTER 4	PUMP MASTER 4	PUMP MASTER 45	PUMP MASTER 45	PUMP MASTER 45	PUMP MASTER 60	PUMP MASTER 60
RATIO	1:1	3:1	3:1	5:1	3:1	6:1	10:1	6:1	12:1
BUNG ADAPTOR	360 001	360 000	360 001	360 002	(1)	(1)	360 006	(1)	(1)
CONNECTION HOSE KIT	362 910	362 910	362 911	362 911	539 009	539 009	539 009	539 009	539 009
WALL MOUNTING BRACKET	360 102	360 102	360 102	360 102	360 132	360 132	360 132	360 132	360 132
FLOOR BRACKET	360 120	360 120	360 120	360 120	360 121	360 121	360 121	360 121	360 121
THERMAL RELIEF KIT	Not needed	609 007	609 007	609 007	609 007	609 008	609 008	609 008	609 008
AIR REGULATOR WITH GAUGE	240 200	240 200	241 201	241 201	241 201	241 201	241 201	241 201	241 201
AIR FILTER LUBRICATOR	240 500	240 500	241 501	241 501	241 501	241 501	241 501	241 501	241 501
FRL	240 000	240 000	241 001	241 001	241 001	241 001	241 001	241 001	241 001
AIRLINE SHUTOFF VALVE	950 302	950 321	950 318	950 318	950 319	950 319	950 319	950 319	950 319
FLUID SHUTOFF VALVE	950 303	950 303	950 303	950 303	950 303	950 303	950 328	950 303	950 328
SUCTION KIT (*)	367 000	367 000	367 000	367 000	(2)	(2)	367 000	(2)	(2)
QUICK AIR COUPLER	253 114	253 114	253 138	253 138	251 412	251 412	251 412	251 412	251 412
QUICK AIR CONNECTOR	259 014	259 014	259 038	259 038	255 312	255 312	255 312	255 312	255 312
AIR CONNECTION ACCESSORIES I.D.	1/4" - 6 mm	1/4" - 6 mm	3/8" - 8 mm	3/8" - 8 mm	1/2" - 12 mm	1/2" - 12,5 mm	1/2" - 12,5 mm	1/2" - 12,5 mm	1/2" - 12,5 mm

OIL PUMPS MOUNTING ACCESSORIES QUICK REFERENCE CHART

(*) Suction kit for 200 l drum. Pump bracket not included.
(1) Pump must be wall or floor mounted.
(2) SAMOA recommends using 1-1/2" x 2 m maximum length hose as suction kit. See page 24.

PUMP INSTALATION RECOMMENDATIONS

Always use a ball valve between the tank outlet and the suction hose. Always use a ball valve between the pump outlet hose and the fluid distribution line.

PUMP INSTALLATION EXAMPLES



WALL MOUNTED PUMP



FLOOR MOUNTED PUMP



AIR OPERATED GREASE PUMPS AND KITS

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GREASE PUMP ACCESSORIES	44





AIR OPERATED GREASE PUMPS

<image><text><text><text>

SAMOA

02

Effective greasing demands a pump capable to deliver the pressure required to force grease flow through the very narrow opening in a grease fitting. For this reason, high pressure, high ratio, pumps are used. Additionally, grease transfer requires pumps able to efficiently move large volumes of viscous products.

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

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

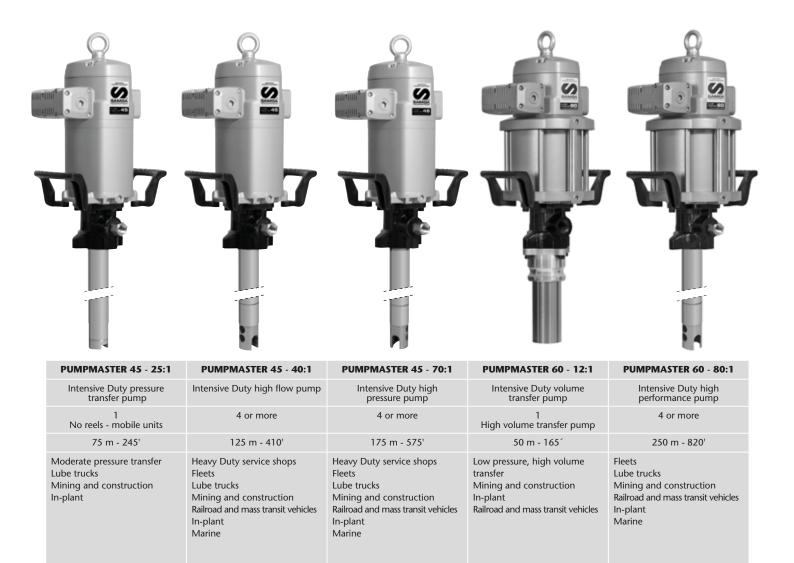
All SAMOA pumps present on demand operation, pump adjusts speed to match system flow and pressure requirements and when the discharge is closed, for example by a closed control valve, then the pump stops. The pump can be left in this stalled condition without damaging the pump nor consuming compressed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

PUMP MASTER®

	PUMPMASTER 3 - 55:1	PUMPMASTER 3+3 - 60:1
PUMP DESCRIPTION	Utility high pressure pump	Heavy Duty high pressure pump
SIMULTANEOUS OPERATION OUTLETS	1 No reels - mobile units	1 to 2
MAX. LINE LENGTH	15 m - 50'	75 m - 245'
APPLICATION	Agriculture Service shops Light Industrial	Heavy Duty service shops Fleets Lube trucks Mining and construction In-plant Railroad and mass transit vehicles

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





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



PUMPMASTER 3 - 55:1 PRESSURE RATIO PUMPS AND PACKAGES

UTILITY HIGH PRESSURE PUMPS

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

Pumps are available with four different suction tube lengths, to fit all commercial grease drums: 12,5 - 20 kg (40 lb), 50 kg (120 lb) and 185 kg (400 lb). They include a height adjustable 2" BSP (M) bung adaptor.

FLUIDS HANDLED

• Grease up to NLGI-2.

MARKETS SERVED

- Agriculture.
- Service shops.
- Light industrial.

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

TECHNICAL DATA				
Pump ratio	55:1			
Air pressure operating range	1,5 to 10 bar (20 to 140 psi)			
Air consumption (1)	165 NL/min (5.8 cfm)			
Maximum fluid outlet pressure	550 bar (7,700 psi)			
Air motor diameter	70 mm (2.75")			
Air motor stroke	35 mm (1.4")			
Delivery at 110 cpm	300 g/min (0.67 lb/min)			
Maximum free flow delivery (2)	540 g/min (1.2 lb/min)			
Air inlet	1/4" NPSM (F)			
Fluid outlet	1/4" NPSM (F)			
Wetted and seal materials	Steel / NBR / PTFE			
Noise level (3)	92 dB			

(1) Maximum air consumption with 6 bar air inlet pressure, NLGI-2 grease at 20 °C and 100 cpm.

NLGI-2, 20 °C (68 °F) CAPACITY

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

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

-	Fluid Pressure	40 75 110 145	ycles / min	AIR C	ONSUMP	TION
	350 300 250 200 200 200 200			150 15,5 170 6 180 6,5 190	50 - 2 -3 100 - 4 -5 150 - 5,5 160 -	50 - 2 - 3 100 - 3,5 110 - 4 120 -
<u>م</u>	150 - 2000 2000 100 - 1500 - 1000 50 - 500			200 7,5	170-6,00 180 6,5 190	130 - 4,5 140 - 5 145 - 5 150 - 5,5 160 -
← ←	o⊥o bar psi lb/ o g/r	0.2 0.4 0.6 0.8 1.		230 1 _{8,12} 7 bar 100 psi	200 17,0 6 6 bar 90 psi	165 1 5,83 5 bar 70 psi

DIMENSIONS (mm) MODEL 404 100 405 100 407 200 409 200 710

200

26

510

38

925

200

26

725

38

1.120

200

26

920

38

30

A (mm)

B (mm)

C (mm)

D (mm)

E (mm)

650

200

26

410

38



PUMPMASTER 3 - 55:1 PRESSURE RATIO PUMPS AND PACKAGES

424 172 - 424 152

482 200

425 150.002

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



Part No.	APPLICATION	PUMP	DRUM COVER	FOLLOWER PLATE	DELIVERY HOSE	GREASE GUN WITH Z-SWIVEL	TROLLEY
424 150	Mobile unit, 12,5 to 18 kg (1)	404 100	418 013	-	2 m x 1/4" 412 102	413 080	430 000
424 152	Mobile unit, 20 kg (1)	404 100	418 002	-	2 m x 1/4" 412 102	413 080	430 000
424 170	Portable unit, 12,5 to 18 kg (1)	404 100	418 013	-	2 m X 1/4" 412 102	413 080	-
424 170.800	Portable unit, 12,5 to 18 kg (1)	404 100	418 013	417 001	2 m x 1/4" 412 102	413 080	-
424 172	Portable unit, 20 kg (1)	404 100	418 002	-	2 m x 1/4" 412 102	413 080	-
424 172.710	Portable unit, 20 kg (1)	404 100	418 002	417 001	2 m x 1/4" 412 102	413 080	-
482 200	Mobile unit, 12,5 to 20 kg (2)	404 100	-	-	2 m x 1/4" 412 102	413 080	480 021
425 150	Mobile unit, 50 kg drum	407 200	418 004	-	3 m x 1/4" 412 103	413 080	431 000
425 150.002	Mobile unit, 50 kg drum	407 200	418 004	417 002	3 m x 1/4" 412 103	413 080	431 000
425 290	Mobile unit, 50 kg drum	407 200	418 004	-	2 m x 1/4" 412 102	413 080	430 000
482 500	Mobile unit, 50 kg drum (3)	407 200	-	-	3 m x 1/4" 412 103	413 080	480 050
428 243	Mobile unit, 185 kg drum	409 200	418 006	417 004	4 m x 1/4" 412 104	413 080	432 000
428 262	Stationaty unit, 185 kg drum	409 200	418 006	417 004	4 m x 1/4" 412 104	413 080	-

(1) Includes carrying handle 741 602.

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

Not included options: **239 000:** 1/4" BSP (MM) connection adaptor. **240 500:** Air filter and pressure regulator, 0-12 bar, 1/4" BSP (FF). **417 001:** Follower plate 298 - 260 mm. For 12,5 and 18 kg pails. **417 002:** Follower plate 370 - 330 mm. For 50 kg standard diameter drums. **417 003:** Follower plate 405 - 360 mm. For 50 kg large diameter drums. 417 005: Follower plate 340 - 300 mm. For 20 kg pails. 411 100: In-line grease meter for grease control gun.

Product specifications are subject to change without prior notice



PUMPMASTER 3+3 - 60:1 PRESSURE RATIO PUMPS AND PACKAGES

HEAVY DUTY HIGH PRESSURE PUMPS

Heavy Duty pumps that combine high pressure (60:1 pressure ratio) and volume delivery. Recommended for use in distribution and greasing systems that include pipe lines, hose reels, etc. with up to 2 simultaneous use outlets even though the number of outlets in the system can be higher. Very reliable pump, it has a removable screen filter at the grease intake for eliminating dirt and impurities that could damage the pump, and a built in filter at the air inlet connection. Includes a height adjustable 2" BSP (M) bung adaptor.

FLUIDS HANDLED

• Grease up to NLGI-2.

MARKETS SERVED

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

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

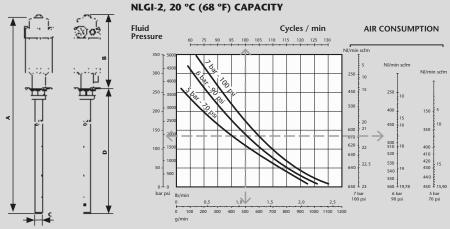
TECHNICAL DATA				
Pump ratio	60:1			
Air pressure operating range	1,5 to 10 bar (20 to 140 psi)			
Air consumption (1)	475 NI/min (16.8 cfm)			
Maximum fluid outlet pressure	600 bar (8,400 psi)			
Air motor diameter	75 mm (3")			
Air motor stroke	75 mm (3")			
Delivery at 100 cpm	500 g/min (1.1 lb/min)			
Maximum free flow delivery (2)	1.200 g/min (2.6 lb/min)			
Air inlet	3/8" NPSM (F)			
Fluid outlet	3/8" NPSM (F)			
Wetted and seal materials	Steel / PTFE / Polyurethane			
Noise level (3)	92 dB			

(1) Maximum air consumption with 7 bar air inlet pressure, NLGI-2 grease at 20 °C and 100 cpm.

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

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

DIMENSIONS (mm)					
MODEL	402 050	402 000	402 025		
A (mm)	806	1.020	1.215		
B (mm)	290	290	290		
C (mm)	30	30	30		
D (mm)	516	730	925		



Product specifications are subject to change without prior notice



PUMPMASTER 3+3 - 60:1 PRESSURE RATIO PUMPS AND PACKAGES

	429 810	429 800	453 602	426 243	486 500	423 150	486 200	423 020
						Ŭ		
	INSTALLATION KIT 50 kg DRUM	INSTALLATION KIT 185 kg DRUM	PUMP HOSE REEL KIT 185 kg DRUM	MOBILE KIT 185 kg DRUM	MOBILE KIT 50 kg DRUMS	MOBILE KIT 50 kg DRUMS	MOBILE KIT 20 kg PAILS	PORTABLE KIT 18 kg PAILS
PART No.	KIT 50 kg	KIT 185 kg	REEL KIT		50 kg	50 kg	20 kg	18 kg
PART No. PUMP	KIT 50 kg DRUM	KIT 185 kg DRUM	REEL KIT 185 kg DRUM	185 kg DRUM	50 kg DRUMS	50 kg DRUMS	20 kg PAILS	18 kg PAILS
	KIT 50 kg DRUM 429 810	KIT 185 kg DRUM 429 800	REEL KIT 185 kg DRUM 453 602	185 kg DRUM 426 243	50 kg DRUMS 486 500	50 kg DRUMS 423 150	20 kg PAILS 486 200	18 kg PAILS 423 020
PUMP	KIT 50 kg DRUM 429 810 402 000	KIT 185 kg DRUM 429 800 402 025	REEL KIT 185 kg DRUM 453 602 402 025	185 kg DRUM 426 243 402 025	50 kg DRUMS 486 500 402 000	50 kg DRUMS 423 150 402 000	20 kg PAILS 486 200	18 kg PAILS 423 020 402 050
PUMP DRUM COVER	KIT 50 kg DRUM 429 810 402 000	KIT 185 kg DRUM 429 800 402 025 418 006	REEL KIT 185 kg DRUM 453 602 402 025 418 006	185 kg DRUM 426 243 402 025 418 006	50 kg DRUMS 486 500 402 000	50 kg DRUMS 423 150 402 000	20 kg PAILS 486 200	18 kg PAILS 423 020 402 050 418 013
PUMP DRUM COVER FOLLOWER PLATE HOSE CONNECTION	KIT 50 kg A29 810 402 000 418 004	KIT 185 kg DRUM 429 800 402 025 418 006 417 004	REEL KIT 185 kg DRUM 453 602 402 025 418 006 417 004	185 kg DRUM 426 243 402 025 418 006	50 kg DRUMS 486 500 402 000	50 kg DRUMS 423 150 402 000	20 kg PAILS 486 200	18 kg PAILS 423 020 402 050 418 013

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

(2) Shielded unit. Includes base with 4 castors.

424 060

DRUM TROLLEY



MOBILE EXTRUSION UNIT FOR 12-20 kg PAILS

432 000

Mobile unit specially designed for its use with hard to pump sticky and high viscosity greases (up to NLGI3). The pump's lower end is fixed to an inductor plate and the pump is mounted to a pneumatic piston that elevates the pump for replacing an empty pail. The pneumatic piston also acts when the pump is in use, pushing the inductor plate against the grease, aiding the pump prime, making possible to pump very high viscosity grease. Follower plate increases productivity as it eliminates air pockets and contributes to maintain grease free from dirt in industrial environments. The air cylinder is controlled with a valve located on the top of the inductor post and it includes a pressure regulator to adjust the downward pressure.

431 000

480 021 (2)

480 050 (1)

The unit includes a PM 3+3 60:1 pressure ratio pump and it is mounted to a rolling base with 4 wheels, two of them with brake.

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

Same as model 424 060 but with no outlet hose and grease control gun.

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

Not included options:

239 001: 1/4" BSP (M) - 3/8" BSP (M) connection adaptor.
240 500: Air filter and pressure regulator, 1/4" BSP (FF).
360 111: Hose reel pivoting bracket.
360 127: Control gun holder and drip tray.
417 001: Follower plate 298 - 260 mm. For 12,5 and 18 kg pails.

417 002: Follower plate 370 - 330 mm. For 50 kg standard diameter drums. **417 003:** Follower plate 405 - 360 mm. For 50 kg large diameter drums. **417 005:** Follower plate 340 - 300 mm. For 20 kg pails.

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



PUMPMASTER 3 AND PUMPMASTER 3+3 ACCESSORIES

418 004 - 417 003





DRUM COVERS AND FOLLOWER PLATES

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

Part No.	DRUM TYPE	DRUM EXTERNAL DIAMETER (MIN MAX.)
418 013	12,5 to 18 kg pails	265 - 310 mm
418 002	20 kg pails	285 - 330 mm
418 016	50 kg drums	350 - 395 mm
418 004	50 kg drums	360 - 405 mm
418 006	185 kg drums	565 - 610 mm

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

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

430 000 - 431 000 - 432 814 - 432 000



DRUM TROLLEYS

430 000 Trolley for 20 kg pails Two wheel trolley with tubular frame for 20 and 50 kg drums.

431 000 Trolley for 50 and 20 kg drumsFour wheel trolley with tubular frame.431 001 Trolley for 50 and 20 kg drums

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

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

432 000 Trolley for 185 kg drum.
Two solid rubber wheels and one swiveling rubber wheel with brake. A hose reel and a pump can be, mounted using optional bracket.
360 134 Pump bracket
For mounting a short pump to trolley 432 000.
360 135 Hose reel bracket
For mounting a hose reel to trolley 432 000.

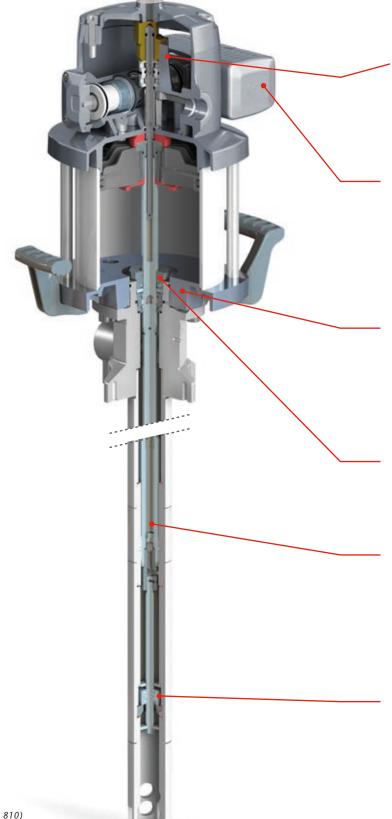
432 814 Heavy Duty trolley for 185 kg drum

Two 260 mm front tires and one swiveling solid rubber wheel with brake. A hose reel can be, mounted using optional bracket. **360 113 Hose reel bracket.** For mounting a hose reel to trolley 432 814.

INTENSIVE DUTY PISTON PUMPS: THE HEART OF A LUBRICATION SYSTEM

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

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



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

PUMP MASTER

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

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

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

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

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



PUMPMASTER 45 - 25:1 PRESSURE RATIO PUMP

INTENSIVE DUTY PRESSURE TRANSFER PUMP

Moderate pressure, high delivery pumps for transfer of grease up to NLGI-1. They are also recommended for use with low viscosity grease in centralized grease systems that do not require a very high pressure output and in large distribution systems of high viscosity oils.

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

FLUIDS HANDLED

- Grease up to NLGI-1.
- High viscosity oil.

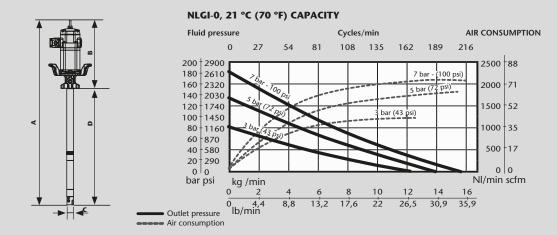
MARKETS SERVED

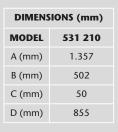
- Lube trucks. • Mining and construction.
- In-plant.

	MODELS				
	APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.
)	185 kg (400 lb) drum	855 mm	1.357 mm	24 kg	531 210

TECHNICAL DATA			
Pump ratio	25:1		
Continuous duty flow rate	6 kg/min (13.2 lb/min)		
Maximum free flow	16 kg/min (35.3 lb/min)		
Air pressure operating range	1,5 - 14 bar (20 - 200 psi)		
Maximum outlet pressure	350 bar (5,000 psi)		
Air motor effective diameter	115 mm (4.5")		
Air motor stroke	100 mm (4")		
Air consumption (1)	1.340 NI/min (47 cfm)		
Air inlet	1/2" BSP (F)		
Fluid outlet	1/2" BSP (F)		
Wetted and seals materials	Cast Iron / Steel / Hard chromed steel / UHMWPE / NBR		
Noise level (2)	80 dB		

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







PUMPMASTER 45 - 40:1 PRESSURE RATIO PUMPS

INTENSIVE DUTY HIGH FLOW PUMPS

High flow pumps with high pressure delivery for use in lubrication systems that require a combination of high flow and pressure delivery. Pumps can be used with grease up to NLGI-2 viscosity. For higher viscosity grease a pneumatic or a gravity fed inductor plate might be required. These pumps can be used in medium length systems that include simultaneous operation outlets. Pumps are available for cover mount to 50 kg - 120 lb and 185 kg - 400 lb open drums and for horizontal and side mount on grease totes and bags.

FLUIDS HANDLED

• Grease up to NLGI-2.

MARKETS SERVED

- Heavy Duty service shops.
- Fleets.
- Mining and construction.
 Pailroad and mass tracit vahiel
- Railroad and mass trnsit vehicles.
- In-plant.Marine.

MODELS				
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.
185 kg (400 lb) drum	855 mm	1.357 mm	25 kg	531 410
50 kg (120 lb) drum	650 mm	1.152 mm	22 kg	531 420
Bulk tote	490 mm	992 mm	26 kg	531 430*

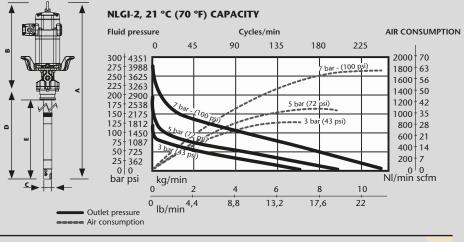
* Indludes adaptor 753 110 to fit a 3" cam-lock connector for use in totes and grease bags.

TECHNICAL DATA			
Pump ratio	40:1		
Continuous duty flow rate	3,5 kg/min (7.5 lb/min)		
Maximum free flow	11 kg/min (24.3 lb/min)		
Air pressure operating range	1,5 - 14 bar (20 - 200 psi)		
Maximum outlet pressure	560 bar (8,000 psi)		
Air motor effective diameter	115 mm (4.5")		
Air motor stroke	100 mm (4")		
Air consumption (1)	750 NI/min (26.5 cfm)		
Air inlet	1/2" BSP (F)		
Fluid outlet	1/2" BSP (F)		
Wetted and seals materials	Cast Iron / Steel / Hard chromed steel / UHMW PE / NBR / PTFE		
Noise level (2)	80 dB		

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

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

DIMENSIONS (mm)					
MODEL	531 410	531 420	531 430*		
A (mm)	1.357	1.152	992		
B (mm)	502	502	502		
C (mm)	50	50	50		
D (mm)	855	650	490		
E (mm)	-	-	410		



(2) Noise level measured

Product specifications are subject to change without prior notice





1111£11111a

531 710

PUMPMASTER 45 - 70:1 PRESSURE RATIO PUMPS

INTENSIVE DUTY HIGH PRESSURE PUMPS

High pressure pump for use in applications that require extra pressure output, cold temperatures or when a low air pressure could limit pump performance. Pumps can be used with grease up to NLGI-2 viscosity. For higher viscosity grease a pneumatic or a gravity fed inductor plate might be required. These pumps can be used in large distribution systems that include simultaneous operation outlets.

Pumps are available for cover mount to 50 kg - 120 lb and 185 kg - 400 lb open drum and for horizontal and side mount on grease totes and bags.

FLUIDS HANDLED • Grease up to NLGI-2.

MARKETS SERVED

- Heavy Duty service shops.
- Fleets.
- Lube trucks. Minning and construction.
- Rail road and mass transist vehicles.
- In-plant.
- Marine

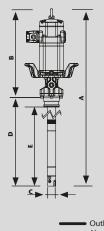
MODELS				
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.
185 kg (400 lb) drum	855 mm	1.357 mm	25 kg	531 710
50 kg (120 lb) drum	650 mm	1.152 mm	22 kg	531 720
Bulk tote	490 mm	992 mm	21 kg	531 730*

* Indludes adaptor 753 110 to fit a 3" cam-lock connector.

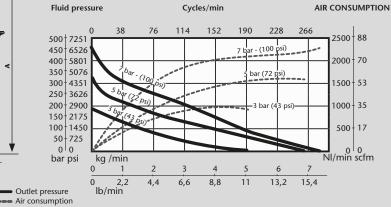
TECHNICAL DATA		
Pump ratio	70:1	
Continuous duty flow rate	2 kg/min (4.5 lb/min)	
Maximum free flow	7,5 kg/min (16.5 lb/min)	
Air pressure operating range	1,5 - 7 bar (20 - 100 psi)	
Maximum outlet pressure	490 bar (7,000 psi)	
Air motor effective diameter	115 mm (4.5")	
Air motor stroke	100 mm (4")	
Air consumption (1)	925 NI/min (32.6 cfm)	
Air inlet	1/2" BSP (F)	
Fluid outlet	1/2" BSP (F)	
Wetted and seals materials	Cast Iron / Steel / Hard chromed steel / UHMW PE / NBR / PTFE	
Noise level (2)	80 dB	

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

DIMENSIONS (mm)					
MODEL	531 710	531 720	531 730*		
A (mm)	1.357	1.152	992		
B (mm)	502	502	502		
C (mm)	50	50	50		
D (mm)	855	650	490		
E (mm)	-	-	410		



NLGI-2, 21 °C (70 °F) CAPACITY



Product specifications are subject to change without prior notice



PUMPMASTER 60 - 12:1 PRESSURE RATIO PUMP

INTENSIVE DUTY VOLUME TRANSFER PUMP

Moderate pressure, very high volume grease pump for use in transfer applications. These pumps can be used with all type of grease up to NLGI-2. For higher viscosity grease a pneumatic inductor plate might be required.

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



MARKETS SERVED

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

MODELS					
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.	
Bulk tote	226 mm	742 mm	19 kg	532 130	
	TECHNICAL	DATA			
Pump ratio	12	1			
Continuous duty flow rate	15	kg/min (33 lb/min)		
Maximum free flow	40	40 kg/min (88 lb/min)			
Air pressure operating range		1,5 - 7 bar (20 - 100 psi)			
Maximum outlet pressure	84	84 bar (1,200 psi)			
Air motor effective diameter	15	150 mm (6")			
Air motor stroke	10	100 mm (4")			
Air consumption (1)	1.1	1.100 NI/min (39 cfm)			
Air inlet	1/2	1/2" BSP (F)			
Fluid outlet		1" BSP (F)			
Wetted and seals materials		st Iron / Steel / Har R / PTFE / Polyuret		I / UHMWPE /	
Noise level (2)	80	dB			

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

 DIMENSIONS (mm)

 MODEL
 532 130

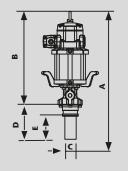
 A (mm)
 742

 B (mm)
 516

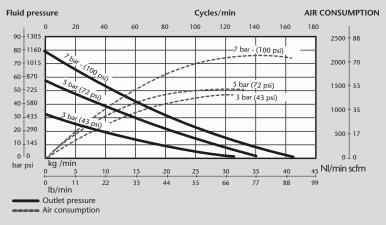
 C (mm)
 70

 D (mm)
 226

 E (mm)
 146



NLGI-2, 21 °C (70 °F) CAPACITY







PUMPMASTER 60 - 80:1 PRESSURE RATIO PUMPS

INTENSIVE DUTY HIGH PERFORMANCE PUMPS

Very high pressure and high volume delivery pump for use in applications that require extra pressure and volume output, cold temperatures or when a low air pressure could limit pump performance. Pumps can be used with grease up to NLGI-2 viscosity. For higher viscosity grease a pneumatic or a gravity fed inductor plate might be required. These pumps can be used in large distribution systems that include simultaneous operation outlets.

Pumps are available for cover mount to 50 kg -120 lb and 185 kg - 400 lb open drum and for side mount on grease totes.

FLUIDS HANDLED • Grease up to NLGI-2.

MARKETS SERVED

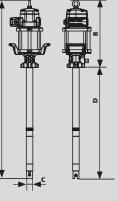
- Mining and construction.
- In-plant.
- Railroad and mass transit vehicles
- Lube trucks.
- Fleets.

MODELS				
APPLICATION	PUMP TUBE HEIGHT	TOTAL HEIGHT	WEIGHT	PART No.
185 kg (400 lb) drum	855 mm	1.371 mm	27 kg	532 810
50 kg (120 lb) drum	650 mm	1.166 mm	24 kg	532 820

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

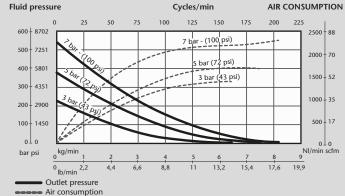
(1) Air consumption at 5 bar air pressure, NLGI-2 grease at 20 °C and 60 cpm. (2) Noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

D	DIMENSIONS (mm)			
MODEL	532 810	532 820		
A (mm)	1.371	1.166		
B (mm)	516	516		
C (mm)	50	50		
D (mm)	855	650		



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NLGI-2, 21 °C (70 °F) CAPACITY



Product specifications are subject to change without prior notice



PUMPMASTER 45 & 60 INSTALLATION KITS

534 720



PUMPMASTER 45 INSTALLATION KITS

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

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

(1) Use follower plate 417 010 or 417 011 as required. Follower plate not included.

(2) Included with pump.

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

534 141

PUMPMASTER 60 INSTALLATION KITS

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



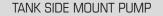
	KIT PART No.	PUMP	RATIO	COVER	FOLLOWER PLATE	CONNECTION KIT	CAMLOCK FEMALE	CAMLOCK MALE
50 kg DRUM MOUNTED PUMP KIT	534 820	532 820	80:1	418 017	(1)	534 103	-	-
185 kg DRUM MOUNTED PUMP KIT	534 810	532 810	80:1	418 026	417 009	534 103	-	-
ANK SIDE	534 840	532 810	80:1	-	-	534 103	950 358	753 110
TANK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

(1) Use follower plate 417 010 or 417 011 as required. Follower plate not included.

(2) Included with pump.

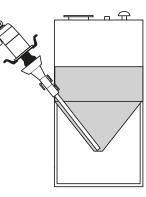
SAMOA recommends using an air filter and pressure regulator at the pump air inlet and a high pressure ball valve between the grease delivery hose and the grease distribution line.

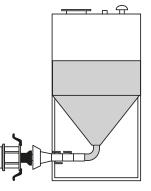
DRUM MOUNTED PUMP



TANK HORIZONTAL MOUNT PUMP







12



GREASE PUMP KITS

AIR OPERATED INDUCTOR PLATE MOUNTED GREASE PUMP KITS

PM45 and PM60 air operated grease pumps mounted onto an air operated inductor 391 000 for use with high viscosity, hard to pump greases in 185 kg - 400 lb drums.

The kit includes pump, twin cylinder air operated inductor with a double lip follower plate and pneumatic controls for the hoist and pump. Kit does not include grease hose connection kit.

The twin cylinder hoist raises the pump and follower plate facilitating the replacement of an empty drum. The pump is rigidly fixed to the inductor plate and when the cylinders exert downward force, they push the pump and the follower plate into the fluid aiding pump prime, eliminating air pockets and channeling and minimizing material waste.

KIT PART No.	PUMP INCLUDED	PRESSURE RATIO	
534 421	531 420	PM45 - 40:1	
534 721	531 720	PM45 - 70:1	
534 121	532 130	PM60 - 12:1	
534 821	532 820	PM60 - 80:1	

534 811



AIR OPERATED PUMP HOIST AND GRAVITY INDUCTOR PLATE MOUNTED GREASE PUMP KITS

PM45 and PM60 pump kits mounted onto a gravity fed follower plate and an air operated pump hoist for use with 185 kg - 400 lb drums.

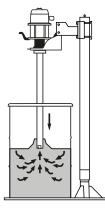
The pump hoist facilitates change-over of empty drums. A pneumatic cylinder lifts the pump from the container. The pump is fixed to a single lip follower plate and the weight of the air motor, pump, and mounting bracket maintains pump prime, eliminates air pockets and channeling and minimizes waste.

The kit includes pump, pump lift with air controls, single lip follower plate and hose connection kit.

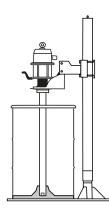
KIT PART No.	PUMP INCLUDED	PRESSURE RATIO	HOSE CONNECTION KIT
534 411	531 410	PM45 - 40:1	534 103
534 711	531 710	PM45 - 70:1	534 103
534 811	532 810	PM60 - 80:1	534 103



No inductor. Air pockets and channels can be formed.



With inductor plate. Pump is permanently primed.



Inductor plates aid to minimize waste left in the drum.

Product specifications are subject to change without prior notice



PUMPMASTER 45 & 60 PUMPS ACCESSORIES

391 000







AIR OPERATED DOUBLE POST INDUCTOR

391 000 Air operated double post inductor

The air operated double post inductor features controlled ram pressure to assist atmospheric pressure and equipment weight in priming the heaviest pumpable materials. When the double lip inductor plate is rigidly attached to the lower end of pump tube, it exerts pneumatic, weight and atmospheric pressure on the material forcing pump prime. The inductor plate also serves as protection against contaminants and eliminates material waste. For use with 185 kg - 400 lb drums.

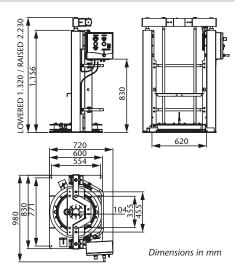
Unit also includes guide rods, drum retaining mechanism and a control box with the following features:

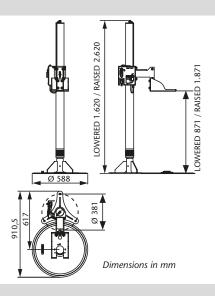
- On/off control of the pump.
- Up/down control of the ram (drum exchange).
- Two independent air pressure regulators, one for the pump and the other for the power ram cylinders.
- Pump/ram independent air pressure gauges.
- Empty drum shut-off safety feature.
- Automatic vacuum release.

GRAVITY INDUCTOR AND PUMP HOIST

391 023 Gravity Inductor and pump hoist

Air operated pump hoist lifts and lowers pumps, making drum changes easier, faster and safer. The pump lower end shall be rigidly fixed to a follower plate with a single rubber lip. The weight of the pump, pump bracket and follower plate plus the atmospheric pressure push the assembly against the fluid, eliminating channeling and air pockets, keeping lubricant free from contaminants, removing all grease from the drum and aiding pump prime. For use with 185 kg - 400 lb drums. Maximum height raised: 2.630 mm.





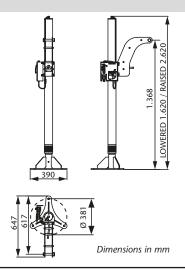
391 022



PUMP HOIST

391 022 Pump Hoist

Maximum utility air operated hoist lifts and lowers pumps, making drum changes easier, faster and safer. Hoist arm adjusts to fit different pump heights and swings a full 360°, serving one or more pumps. It can be used with 185 kg - 400 lb and 50 kg - 120 lb drums. Maximum height raised: 2.630 mm. Minimum height lowered: 1.630 mm.





GREASE PUMP ACCESSORIES

418 026 - 418 017

DRUM COVERS

For PumpMaster 45 and 60 pumps

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



417 009 - 417 010

FOLLOWER PLATES

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



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

741 604

HOLD DOWN KITS

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

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

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

1	PART No.	APPLICATION	MAXIMUM MINIMUM DRUM DIAMETER		
	417 009	185 kg - 400 lb	590 - 550 mm		
	417 010	50 kg - 120 lb	405 - 360 mm		
	417 011	50 kg - 120 lb	370 - 330 mm		

AIR AND GREASE HOOK UP KITS

FOR	PM3+3	PUMPS	

	Includes 1 m x 3/8" air hose (PN 247 710) with 3/8" - 1/2" BSP (MM) connection threads, quick air coupler 251 438, air nipple 255 338, 1,5 m x 3/8" high pressure grease hose (412 392) with 3/8"-1/2" BSP (MM) connection threads
	FOR PM45 AND PM60 PUMPS ¹
534 103	Includes 1,8 m x 1/2" air hose (248 018) with 1/2" BSP (MM) connection threads, elbow 239 352, quick air coupler 251 412, air nipple 255 312, 1,8 m x 1/2" high pressure grease hose (412 202) with 1/2" BSP (MM) connection threads and swivel elbow (945 736) with 1/2" BSP (MF) threads

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

	AIR ACCESSORIES						
AIR ACCESSORIES 1/4" CONNECTION THREADS 1/4" BSP (FF)		1/2" CONNECTION THREADS 1/2" BSP (FF) WITH ONE 1/2" BSP (M) 3/8" BSP (F) ADAPTOR		3/4" CONNECTION THREADS 3/4" BSP (FF)			
AIR PRESS	SURE DR 0-12 BAR	240 200	241	201	242 202		
COMBINE FILTER AN REGULAT	ID PRESSURE	240 500	241	501	242 302 (Filter only)		
AIR LUBR	CATOR	240 400	241	401	242 402		
		240 200	241 50	01	242 202		
LOW	AND MEDIUM	PRESSURE VALVES		AIR LINE SH	UTOFF VALVES		
950 305	1/4" BSP (FF), 6	55 bar quarter turn valve	950 318	Air v	alve, 3/8" BSP (FF)		
950 320	3/8" BSP (FF), 6	55 bar quarter turn valve	950 319	Air v	alve, 1/2" BSP (FF)		
950 300	1/2" BSP (FF), 6	55 bar quarter turn valve					
	HIGH PRESSU	RE VALVES	950 304		\		
950 304	1/2" BSP (FF), 5	00 bar quarter turn valve			N. Contraction		
950 328	3/4" BSP (FF), 4	00 bar quarter turn valve			10		

753 110 - 950 358



CAM-LOCK ADAPTORS

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

753 110 Male Cam-Lock adaptor

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

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

950 329 1" BSP (FF), 350 bar quarter turn valve



GREASE PUMP ACCESSORIES

GREASE HOSES

412 103



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

412 101, 1 m x 1/4". Working pressure: 400 bar. Connection threads: 1/4" BSP (MM) 412 190, 1,5 m x 1/4". Working pressure: 400 bar. Connection threads: 1/4" BSP (MM) 412 102, 2 m x 1/4". Working pressure: 400 bar. Connection threads: 1/4" BSP (MM) 412 103, 3 m x 1/4". Working pressure: 400 bar. Connection threads: 1/4" BSP (MM) 412 104, 4 m x 1/4". Working pressure: 400 bar. Connection threads: 1/4" BSP (MM)

412 391, 1,5 m x 3/8". Working pressure: 400 bar. Connection threads: 1/4" - 3/8" BSP (MM) 412 392, 1,5 m x 3/8". Working pressure: 400 bar. Connection threads: 3/8" BSP (MM)

412 202, 1,8 m x 1/2". Working pressure: 400 bar. Connection threads: 1/2" BSP (MM) 412 203, 3 m x 1/2". Working pressure: 400 bar. Connection threads: 1/2" BSP (MM)

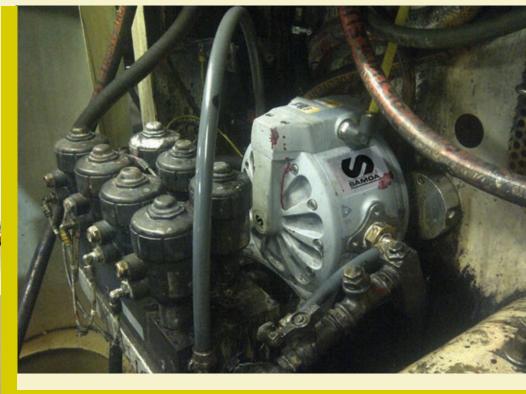
GREASE PUMP MOUNTING ACCESSORIES QUICK REFERENCE CHART							
PUMP	PUMPMASTER 3+3	PUMPMASTER 45	PUMPMASTER 45	PUMPMASTER 45	PUMPMASTER 60	PUMPMASTER 60	
RATIO	60:1	25:1	40:1	70:1	12:1 (1)	80:1	
BUNG ADAPTOR	410 002	(2)	(2)	(2)	(2)	(2)	
CONNECTION HOSE KIT	412 920	534 103	534 103	534 103	539 009	534 103	
DRUM COVER 185 kg	418 006	418 026	418 026	418 026	N/A	418 026	
DRUM COVER 50 kg	418 004	N/A	418 017	418 017	N/A	418 017	
FOLLOWER PLATE 185 kg	417 004	417 009	417 009	417 009	N/A	417 009	
FOLLOWER PLATE 50 kg	417 002	N/A	417 011	417 011	N/A	417 011	
POWER RAM	N/A	N/A	391 000	391 000	391 000	391 000	
SINGLE POST PUMP HOIST	N/A	N/A	391 023	391 023	N/A	391 023	
CAM-LOCK ADAPTOR	N/A	N/A	753 110 (3)	753 110 (3)	753 110 (3)	753 110 (4)	
CAM-LOCK CONNECTOR	N/A	N/A	950 358	950 358	950 358	N/A	
AIR REGULATOR WITH GAUGE	241 201	241 201	241 201	241 201	241 201	241 201	
AIR FILTER LUBRICATOR	241 501	241 501	241 501	241 501	241 501	241 501	
FRL	241 001	241 001	241 001	241 001	241 001	241 001	
AIRLINE SHUTOFF VALVE	950 318	950 319	950 319	950 319	950 319	950 319	
FLUID SHUTOFF VALVE	950 304	950 328	950 304	950 304	950 328	950 304	
QUICK AIR COUPLER	253 138	251 412	251 412	251 412	251 412	251 412	
QUICK AIR CONNECTOR	259 038	255 312	255 312	255 312	255 312	255 312	
AIR CONNECTION ACCESSORIES I.D.	3/8" - 8 mm	1/2" - 12,5 mm	1/2" - 12,5 mm	1/2" - 12,5 mm	1/2" - 12,5 mm	1/2" - 12,5 mm	

(1) PM60, 12:1 pump is only available for horizonal mount on tanks, totes and grease bags.
 (2) Flange mounted pumps. No bung adaptor for fixing a pump to a cover.
 (3) Included in short pumps for horizontal mount on tanks, totes and grease bags. Required for vertical mount on grease tanks (long pumps).

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

AIR OPERATED PUMPS FOR OTHER SERVICE FLUIDS

AIR OPERATED DIAPHRAGM PUMPS	48
DIAPHRAGM PUMPS ACCESSORIES	53
AIR OPERATED PISTON PUMPS FOR FLUIDS	54







INNOVATIVE TECHNOLOGIES CREATE THE DIFFERENCE

Conventional air operated diaphragm pumps pump the fluid around the outside of the pump and compressed air acts on the inside face of the diaphragms. Directflo pumps are inside out pumps, the fluid is pumped through the centre of the pump and compressed air acts on the outside face of the diaphragms.

Important innovations were necessary to realise the central flow concept and, whilst developing Directflo, further inventions were made that built on the central flow concept. A few highlights are described below.



FRICTIONLESS PIVOTING AIR VALVE

- High operational reliability.
- Variable flow rate and pressure by adjusting the air pressure.
- Non stalling.
- Non icing.
- Self-cleaning.
- Extremely fast switching between strokes reduces air consumption and minimizes pulsations.
- Enables a short stroke pump design, for long diaphragm life.
- Tolerates dry, damp, dirty or oily air.

В

BALL CHECK VALVES ADJACENT TO DIAPHRAGMS

- Very fast valve action, even with viscous fluids. Together with the high speed frictionless pivoting air valve, this enables a short stroke pump design, for long diaphragm life.
- Enables superior pump suction and thus improves overall pump performance.

SUPERIOR ALL-ROUND PUMPING PERFORMANCE

- Significant dry suction lift eliminates self-priming issues.
- Discharge fluids at up to 7 bar (100 psi), to pump medium viscosity fluids even over long pipe runs and up to significant heights.
- Efficient compressed air usage.

C

STRESS FREE DIAPHRAGM COUPLINGS

- Non-rigid sliding couplings between push rod and diaphragms prevent diaphragm and push rod stress.
- Long leak free diaphragm life.
- Fast and easy diaphragm service.

D

SINGLE PART MOULDED PUMP BODY

- Minimizes energy losses within the pump.
- No leaks.
- Compact.

E

FLANGE FASTENING PLATES

- Pumps with plastic central bodies are fitted with load spreading stainless steel flange fastening plates.
- Reduces the risk of damage to plastic bodies when flange bolts are over tightened.
- Enhances sealing in the areas between flange bolts and so reduces the risk of flange leaks.



DIRECTFLO® PUMP RANGE COMPARATIVE CHART

FLUIDS HANDLED

• Windshield wash.

• Hydraulic fluids.

Oils.Antifreeze, coolant.

• Diesel.

AdBlue[®] / DEF.
Water.

• Waste oil.

• Waste antifreeze.

- JUEF.
- Car and truck dealers.

MARKETS SERVED

- Construction, mining.
- Rail way and mass transit vehicles. Lube trucks.
- Fleets.
- Fleets. In-plant.



PLASTIC PUMPS			
DF SERIES	DF30	DF50	DF100
PRESSURE RATIO	1:1	1:1	1:1
MAXIMUM FREE DELIVERY (1)	38 l/min (10 US gpm)	50 l/min (13.2 US gpm)	100 l/min (26.4 US gpm)
DELIVERY PER STROKE APPROX. (1)	0,07 litres (0.02 US gal)	0,1 litres (0.026 US gal)	0,25 l (0.07 US gal)
DELIVERY PER CICLE (2 X STROKES) (1)	0,14 litres (0.04 US gal)	0,2 litres (0.05 US gal)	0,50 l (0.13 US gal)
AIR PRESSURE OPERATING RANGE	1,5 to 7 bar (22 to 102 psi)	1,5 to 7 bar (22 to 102 psi)	1,5 to 7 bar (22 to 102 psi)
SOLIDS IN SUSPENSION MAXIMUM SIZE	3 mm (0.12")	3 mm (1/8")	4 mm (3/16")
MAXIMUM DRY SUCTION HEAD (1)	4 m (13')	6 m (20')	4,5 m (15')
MAXIMUM WET SUCTION HEAD (1)	8 m (26')	8 m (26')	7 m (23')
WEIGHT	1,9 kg (4.19 lb)	2,2 kg (4.85 lb)	5,1 kg (11.24 lb)
FLUID INLET CONNECTION	1/2" BSP (F)	1/2" BSP (F)	1" BSP (F)
FLUID OUTLET CONNECTION	1/2" BSP (F)	1/2" BSP (F)	1" BSP (F)
AIR INLET CONNECTION	3/8" NPSM (F)	3/8" NPSM (F)	3/8" NPSM (F)

(1) Data measured with water, air inlet pressure 7 bar (100 psi), 20 °C (68 °F).



METAL PUMPS

DF SERIES	DF50	DF100	DF250
PRESSURE RATIO	1:1	1:1	1:1
MAXIMUM FREE DELIVERY (1)	50 l/min (13.2 US gpm)	100 l/min (26.4 US gpm)	250 l/min (66 US gpm)
DELIVERY PER STROKE APPROX. (1)	0,1 litres (0.026 US gal)	0,25 l (0.07 US gal)	0,6 l (0.16 US gal)
DELIVERY PER CICLE (2 X STROKES) ⁽¹⁾	0,2 litres (0.05 US gal)	0,5 l (0.13 US gal)	1,2 l (0.32 US gal)
AIR PRESSURE OPERATING RANGE	1,5 to 7 bar (22 to 100 psi)	1,5 to 7 bar (22 to 100 psi)	1,5 to 7 bar (22 to 102 psi)
SOLIDS IN SUSPENSION MAXIMUM SIZE	3 mm (1/8")	4 mm (3/16")	6 mm (1/4")
MAXIMUM DRY SUCTION HEAD (1)	6 m (20')	4,5 m (15')	5 m (16.4')
MAXIMUM WET SUCTION HEAD (1)	8 m (26')	7 m (23')	8 m (26')
WEIGHT	3,5 kg (7.72 lb)	7,2 kg (16 lb)	20 kg (45 lb)
FLUID INLET CONNECTION	1/2" BSP (F)	1" BSP (F)	1 1/2" BSP (F) and DIN PN-10 flange
FLUID OUTLET CONNECTION	1/2" BSP (F)	1" BSP (F)	1 1/2" BSP (F) and DIN PN-10 flange
AIR INLET CONNECTION	3/8" NPSM (F)	3/8" NPSM (F)	1/2" NPSM (F)

(1) Data measured with water, air inlet pressure 7 bar (100 psi), 20 $^{\circ}\text{C}$ (68 $^{\circ}\text{F}\text{)}.$

03



AIR OPERATED DIAPHRAGM PUMPS



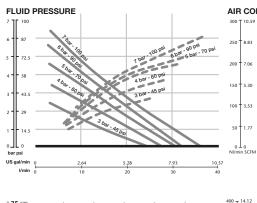
PLASTIC PUMPS

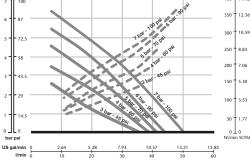
Plastic pumps are adequate for indoor use and they can handle a wide range of fluids used for vehicle service. Pump air valve module and lateral pump covers are manufactured in polypropylene or conductive polypropylene depending on models.

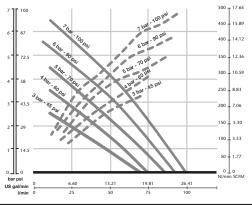
Typical applications are transfering and dispensing of windshield wash and antifreeze solutions, pure windshield wash and AdBlue[®] / DEF. They can be used as stand-alone pumps for transfer applications or as systems pumps in distribution systems that include hose reels. ATEX approved pumps are available for use in potential explosive environments and with flammable fluids like pure ethanol.

PUMP SIZE	PART NUMBER	PUMP BODY	DIAPHRAGMS	BALLS	OTHER WETTED PARTS	APPLICATIONS
DF30	553 164	Polypropylene	TPE	PTFE	FKM, Stainless steel	Antifreeze and windshield wash solutions, AdBlue [®] / DEF
(38 l/min)	553 162	Conductive Polypropylene	PTFE	PTFE	FKM, Stainless steel	$\langle \widehat{\mathfrak{Ex}} \rangle$ ATEX pump for pure ethanol, pure windshield wash
DF50	552 164	Polypropylene	TPE	PTFE	FKM, Stainless steel	Antifreeze and windshield wash solutions, AdBlue® / DEF
(50 l/min)	552 162	Conductive Polypropylene	PTFE	PTFE	FKM, Stainless steel	$\langle \widehat{\mathfrak{tx}} \rangle$ ATEX pump for pure ethanol, pure windshield wash
DE100	551 164	Polypropylene	TPE	PTFE	FKM, Stainless steel	Antifreeze and windshield wash solutions, AdBlue® / DEF
DF100 (100 l/min)	551 162	Conductive Polypropylene	PTFE	PTFE	FKM, Stainless steel	$\langle \widehat{\mathfrak{Ex}} \rangle$ ATEX pump for pure ethanol, pure windshield wash









AIR CONSUMPTION

FLUID PRESSURE

Product specifications are subject to change without prior notice



AIR OPERATED DIAPHRAGM PUMPS

03



METAL PUMPS

Metal pumps are adequate for indoor and outdoor use and they can handle a wide range of fluids used for vehicle service. Pump air valve module and lateral pump covers are manufactured in aluminium.

Typical applications are transfering and dispensing of windshield wash, antifreeze solutions, lubricants and diesel, and for waste oil evacuation. They can be used as stand-alone pumps for transfer applications or as systems pumps in distribution systems that include hose reels.

> 12.36 350

PUMP SIZE	PART NUMBER	PUMP BODY	DIAPHRAGMS	BALLS	OTHER WETTED PARTS	APPLICATIONS
DF50 (50 l/min)	552 010	Aluminium	TPE	Acetal	PTFE, NBR, Stainless steel	Antifreeze and windshield wash solutions, lubricants
DF100 (100 l/min)	551 010	Aluminium	TPE	Acetal	PTFE, NBR, Stainless steel	Antifreeze and windshield wash solutions, lubricants, waste oil evacuation, diesel
(1001/min)	551 020	Aluminium	PTFE	Acetal	FKM, Stainless steel	Diesel (1)
DF250	554 010	Aluminium	TPE	Acetal	NBR, Stainless steel	Antifreeze and windshield wash solutions, lubricants, waste oil evacuation, diesel.
(250 l/min)	554 020	Aluminium	PTFE	Acetal	FKM, Stainless steel	Diesel (1)

(1) Some types of diesel include additives in their formulation that might not be compatible with TPE. PTFE diaphragms are recommended in this case. AIR CONSUMPTION

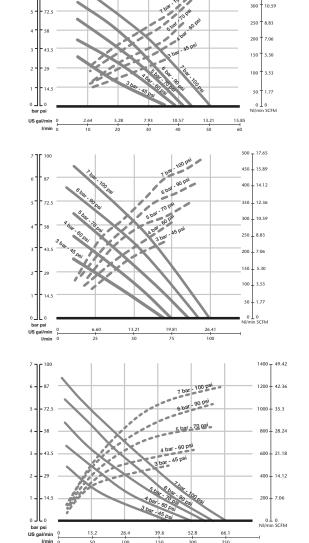
FLUID PRESSURE





554 010





FLUID PRESSURE

Product specifications are subject to change without prior notice



® **G**, **directflo** Central flow technology

AIR OPERATED DIAPHRAGM PUMPS

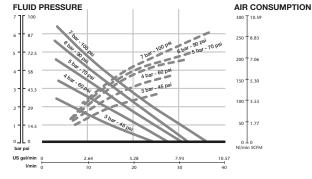
PLASTIC MIX PUMPS

DF30 and DF50 plastic diaphragm pumps with a dual inlet for 1:1 ratio mixing of fluids with similar viscosities, like windshield wash or antifreeze with water. All dual inlet pumps have 2 x 3/8" BSP (F) inlet. All other technical features of these pumps are the same as the ones for the DF30 and DF50 pumps.

PUMP SIZE	PART NUMBER	PUMP BODY	DIAPHRAGMS	BALLS	OTHER WETTED PARTS	APPLICATIONS
DF30 (38 l/min)	553 124	Polypropylene	TPE	PTFE	FKM, Stainless steel	1:1 ratio water / windshield or antifreeze solutions
DF50 (50 l/min)	552 124	Polypropylene	TPE	PTFE	FKM, Stainless steel	1:1 ratio water / windshield or antifreeze solutions

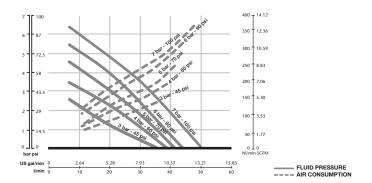
553 124





552 124





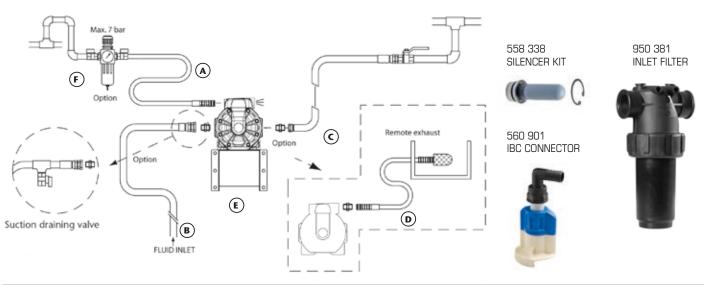


DIAPHRAGM PUMPS ACCESSORIES

DF PUMP MOUNTING SPECIFICATIONS

DF SERIES	DF30	DF50 (1)	DF100 (1)	DF250
A AIR CONECTION HOSE	3/8" - 9,5 mm	3/8" - 9,5 mm	3/8" - 9,5 mm	1/2" - 12,5 mm
B FLUID SUCTION HOSE	1/2" - 12,5 mm	1/2" - 12,5 mm	1" - 25 mm	1-1/2" - 38 mm
C FLUID DELIVERY HOSE	1/2" - 12,5 mm	1/2" - 12,5 mm	3/4" - 19 mm / 1" - 25 mm	1-1/2" -38 mm
D AIR EXHAUST VENT HOSE	3/8" - 9,5 mm Requires adapter 855 432	3/8" - 9,5 mm Requires adapter 855 432	3/8" - 9,5 mm Requires adapter 855 432	1" - 25,4 mm
E WALL BRACKET	360 100	360 100	360 101	N/A (2)
DRUM / TOTE BRACKET	360 137	360 137	360 137	N/A
F AIR FILTER AND PRESSURE REGULATOR (3)	240 500	240 500	241 501	241 501
AIR PRESSURE REGULATOR (3)	240 300	240 300	241 201	241 201
QUICK AIR COUPLER	253 138	253 138	253 138	251 412
ADDITIONAL SILENCER KIT	558 338	558 338	558 338	N/A
IBC CONNECTOR	560 901	560 901	560 901	N/A

Metal and plastic pumps.
 Pump to be floor or tank mounted.
 Always place the air treatment element close to the air pipe. Connect air nipple to the pump.



CARBON STEEL FITTINGS		POL	YPROPYLENE FITTINGS		EEL LOW PRESSURE
945 593	1/2" BSP(MM)	689 059	1/2" BSP (MM)	950 300	1/2" BSP (FF)
945 551	3/4" BSP (MM)	689 061	1/2" BSP (F) - 3/4" BSP (F)	950 303	3/4" BSP (FF)
945 555	1" BSP (MM)	689 062	1/2" BSP (M) - 3/4" BSP (F)	950 306	1" BSP (FF)
945 567	2" - 1-1/2" BSP (MM)	689 056	3/4" BSP(F) - 1" BSP (F)	950 312	1-1/2" BSP (FF)
945 681	1-1/2" - 1" BSP (MM)	689 055	1" BSP (FF)	950 320	3/8" BSP (FF) - AIR
945 552	1" - 3/4" BSP (MM)	689 060	1" BSP (MM)	POLYPROP	ILENE INLET FILTERS
945 554	3/4" -1/2" BSP (MM)	689 079	1-1/4" BSP (M) - 3/4" BSP (F)	950 381	1-1/4" BSP (FF)
945 565	2" - 1" BSP (MF)	689 054	19 mm hose tail - 1/2" BSP (M)		
945 670	1" - 3/4" BSP (MF)	689 058	19 mm hose tail - 3/4" BSP (F) L elbow		
369 900	3/4" - 1/2" BSP (MF)	945 580	19 mm hose tail - 3/4" BSP (M)		
		689 045	19 mm hose tail - 1" (M)		
		689 072	19 mm hose tail - 1" (F)		
		689 046	25 mm hose tail - 1" (M)		
		689 073	25 mm hose tail - 1" (F)		

Use hoses and accessories compatible with the pumped fluid.

03 SAMOA

AIR OPERATED PISTON PUMPS FOR FLUIDS







Common Common

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PUMP MASTER®

	PUMP MAST	ER 2	PUMP MASTER 4
	NICKEL PROTECTED PUMP	STAINLESS STEEL PUMP	STAINLESS STEEL PUMP
PART No.	601 202	331 120	333 120
PUMP TYPE	Universal stub pump	Universal stub pump; divorced	Universal stub pump; divorced
PRESSURE RATIO	1:1	1:1	3:1
EFFECTIVE AIR PISTON DIAMETER	35 mm (1 1/2")	35 mm (1 1/2")	60 mm (2 1/2")
PISTON STROKE	75 mm (3")	75 mm (3")	75 mm (3")
AIR PRESSURE OPERATING RANGE	1,5 to 10 bar (20 to 145 psi)	1,5 to 10 bar (20 to 145 psi)	1,5 to 10 bar (20 to 145 psi)
AIR INLET	1/4" BSP (F)	1/4" BSP (F)	3/8" BSP (F)
FLUID INLET	1" BSP (F)	1" BSP (F)	1" BSP (F)
FLUID OUTLET	3/4" BSP (F)	3/4" BSP (F)	3/4" BSP (F)
DELIVERY AT 100 CYCLES PER MINUTE	13,5 l/min - 3.6 gal/min	25 l/min - 6.6 gal/min	25 l/min - 6.6 gal/min
MAXIMUM FREE DELVERY	55 l/min - 14.5 gal/min	38 l/min - 10 gal/min	40 l/min - 10.6 gal/min
WETTED MATERIALS	Nickel coated aluminium and steel, stainless steel, acetal, NBR, polyurethane	PTFE, Viton [®] , stainless steel	PTFE, Viton [®] , stainless steel
HEIGHT ADJUSTABLE BUNG ADAPTOR	Included	Included	Included

Air Operated Piston Pumps for Fluids accessory: P.N. 331 110.002, PVC suction tube for 205 l drums.

351 121

SPECIALITY PUMP

351 121 PumpMaster 2, 1:1 pressure ratio suction pump Pump Master pump with 1:1 ratio with a modified air valve to allow a lower upward movement of the piston to improve pump suction capacity and avoid pump cavitation when suctioning fluids like waste oil through small diameter suction canes.

HOSE REELS

HOSE REEL MOUNTING RECOMMENDATIONS
RM-12 DOUBLE PEDESTAL DOUBLE ARM HOSE REELS
RM-12US ULTRA SLIM ENCLOSED HOSE REELS
RM-12S SINGLE ARM ALUMINIUM HOSE REELS
RM-12CL INDIVIDUALLY ENCLOSED HOSE REELS
RM-12L HEAVY DUTY HOSE REELS
RM-34 HEAVY DUTY HOSE REELS
RM-100 HEAVY DUTY LARGE CAPACITY HOSE REELS
RM-150 HEAVY DUTY LARGE DELIVERY HOSE REELS
COMPACT REELS FOR AIR AND CABLE
HOSE REEL ACCESSORIES







SAMOA hose reels are used around the world and they have been designed to be premium quality fluid reels. Hose reels are adaptable to wall, floor or ceiling mounting, individually or in banks. They are available for high, medium and low pressure applications and with different hose capacities to afford maximum flexibility in selecting a hose reel assembly to match any specific need. SAMOA hose reels are designed with non-restrictive fluid passages, to handle the right hose diameter for each application and provide the quickest material delivery.

SAMOA hose reels are spring-powered and self-retracting; a latch locks the reel at desired length and a slight pull releases latch, and the hose retracts smoothly onto reel. Hose guide arm can be placed in different positions to accommodate any method of mounting and permit hose to be automatically removed or retracted without kinking, reducing strain on hose and minimizing the possibility of hose damage.



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

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.

ALL SAMOA REELS HAVE

- Superior power spring life. Special fatigue resistant steel spring guarantees long life and trouble free operation and provides even tension at every point, when pulling or retracting hose.
- 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.

HOSE SPECIFICATIONS

Compressed air, low pressure water - SBR black rubber with single textile reinforcement braid and zinc plated fittings.

Oil, antifreeze solutions - NBR black rubber with single steel reinforcement steel braid and zinc plated fittings.

High pressure grease - NBR black rubber with single steel reinforcement high density braid and zinc plated fittings.

Windshield wash solutions, AdBlue®/DEF - EPDM hose with single textile reinforcement braid and stainless steel fittings.

High pressure water: SBR black rubber with single steel reinforcement braid and zinc plated fittings.

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 shall be positioned at the inlet hose to allow the isolation of each reel for servicing purposes.



HOSE REEL MOUNTING RECOMMENDATIONS

- Install reels as high as possible when mounted to wall or ceiling. Minimum height from the lowest reel point to the floor must be 2,5 m (8').
- Always avoid lateral pulls of hose. In case they cannot be avoided, and for single reel installations, use a pivoting bracket.
- Hose reels allow positioning the hose outlet in different positions. Always choose the one that allows a tangential unwind of the hose.
- A shut off valve shall be installed at the inlet hose to allow the isolation of each reel for service purposes.

CEILING MOUNT

Use this position whenever the hose is pulled perpendicularly to the mounting surface. Typical use is when the reel is mounted to a ceiling, a hose reel stand 360 160 or 360 165, or inside lubrication pits. This position can also be used when the reel is mounted to a wall at a maximum height of 2 m. In these two cases the use of a pivoting bracket 360 111 is recommended to reduce torque when the reel is submitted to lateral pulls.

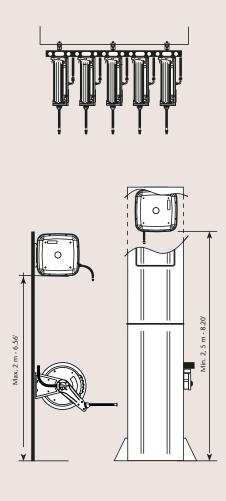
Position not valid for reels RM-100 and RM-150 because of their weight.

REAR ROLLER FLOOR MOUNT

Use this position whenever the hose is pulled tangentially to the mounting surface. Typical use are on lube trucks and tanks. When mounted to a wall, this position has the advantage that the hose lays close to the wall, it does not represent an obstacle and the torque on the outlet arm created when the hose is pulled laterally is minimum. **Because of their weight, RM-100 and RM-150 reels shall not be mounted to a wall**.

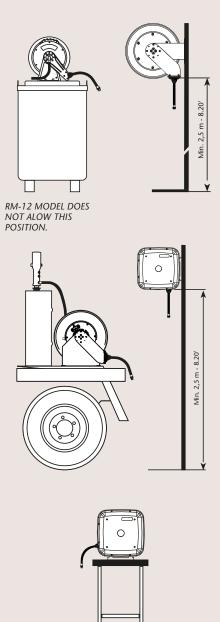
SIDE ROLLER MOUNT

Use this position whenever the hose is pulled parallel to the mounting surface. Typical use are on tanks, lube trucks, workbenches, etc. It can also be mounted to a wall at a minimum height of 2,5 m - 8.20', however it might create an obstacle in the shop because the hose is further out from the wall. Additionally, increased torque on the arm with lateral pulls might require using a pivoting bracket 361 111. **Because of their weight, RM-100 and RM-150 reels shall not be mounted to a wall.**





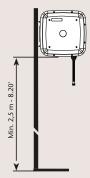
MOUNTING EXAMPLES FOR ALL RM-12 SERIES AND RM-34 REELS.

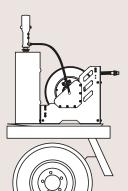


MOUNTING EXAMPLES OF ALL RM-12 SERIES,

RM-34 REELS, RM-100 AND RM-150 REELS.







MOUNTING EXAMPLES OF ALL RM-12 SERIES, RM-34 REELS, RM-100 AND RM-150 REELS.



FLUIDS HANDLED

• Air.

• Water.

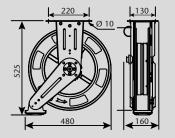
- Antifreeze Solutions.
- Synthetic and Mineral Oils.
- Grease.

MARKETS / APPLICATIONS

- Car and truck dealers.
- Service shops.
- General manufacturing.
- Service stations.

MOUNTING

- Floor.
- Wall.
- Ceiling.
- Tank.



Dimensions (mm)

RM-12 DOUBLE PEDESTAL DOUBLE ARM HOSE REELS

10 METERS MAXIMUM HOSE CAPACITY

Full metal hose reels, can handle up to 10 m x 1/2" hose.



- Fatigue resistant steel spring for years of durable performance and even load when pulling and recoiling the hose.
- Full metal double pedestal arm construction, epoxy powder coated for increased wear resistance.
- Forged brass shaft ensures a leak free operation.
- Hose reels with hose include 0,8 m inlet hose.

PART No.	BARE REEL	HOSE INSIDE DIAMETER	HOSE LENGTH	CONNECTING HOSE INLET	DELIVERY HOSE OUTLET	PRESSURE RATING	WEIGHT (With hose)				
AIR / WATER / ANTIFREEZE SOLUTIONS											
501 100	501 198	3/8"	10 m	1/2" BSP (M)	1/4" BSPT (M)	20 bar	17,9 kg				
			MINERA	L AND SYNTHETIC LUBRICANT	5						
501 200	501 298	1/2"	10 m	1/2" BSP (M)	1/2" BSP (M)	160 bar	20 kg				
GREASE											
501 300	501 398	1/4"	10 m	1/2" BSP (M)	1/4" BSP (M)	400 bar	19,2 kg				

(1) Bare reels include hose stopper and adaptors for connecting flow delivery and inlet hoses.



FLUIDS HANDLED

• Air.

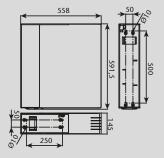
- Water.
- Antifreeze Solutions.
- Synthetic and Mineral Oils.
- Grease.

MARKETS / APPLICATIONS

- Car and truck dealers.
- Service shops.

MOUNTING

- Wall.
- Ceiling.



Dimensions (mm)

RM-12US ULTRA SLIM ENCLOSED HOSE REELS

15 METERS MAXIMUM HOSE CAPACITY

Full metal hose reels, can handle up to 15 m x 1/2" hose and 12 m x 5/8" hose.



- Fully enclosed reel allows mounting a hose reel bank with no empty spaces between the reels.
- Very narrow design.
- Fatigue resistant steel spring for years of durable performance and even load when pulling and recoiling the hose.
- Full metal reel, epoxy powder coated for increased wear resistance.
- Full port shaft and swivel for no restrictions.
- Spool mounted on two permanent lubricated and sealed ball bearings to reduce torque load on spring for smooth retraction and longer life.
- Hose reel with hose include 0,8 m inlet hose.

PART No.	BARE REEL	HOSE INSIDE DIAMETER	HOSE LENGTH	CONNECTING HOSE INLET	DELIVERY HOSE OUTLET	PRESSURE RATING	WEIGHT (With hose)			
			AIR / WATE	R / ANTIFREEZE SOLUTIONS						
502 711.400	502 791.400	3/8"	10 m	1/2" BSP (M)	3/8" BSP (M)	20 bar	26,5 kg			
502 710.400	502 791.400	3/8"	15 m	1/2" BSP (M)	3/8" BSP (M)	20 bar	27,5 kg			
			MINERAL AN	ID SYNTHETIC LUBRICANTS						
502 701.400	502 790.400	1/2"	10 m	5/8" BSP (F)	1/2" BSP (M)	100 bar	34,6 kg			
502 700.400	502 790.400	1/2"	15 m	5/8" BSP (F)	1/2" BSP (M)	100 bar	32,8 kg			
502 702.400	502 792.400	5/8"	12 m	5/8" BSP (F)	3/8" BSP (M)	100 bar	33,5 kg			
	GREASE									
502 720.400	502 793.400	3/8"	15 m	3/8" BSP (M)	1/4" BSP (M)	400 bar	30 kg			



FLUIDS HANDLED

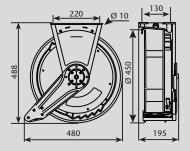
- Air.
- Water.
- Antifreeze and Windshield Wash Solutions.
- High Pressure Hot Water.
- Synthetic and Mineral Oils.
- AdBlue[®] / DEF.
- Grease.

MARKETS / APPLICATIONS

- Car and truck dealers.
- Service shops.
- Fleets.
- General manufacturing.
- Service stations.
- Lube trucks.

MOUNTING

- Floor.
- Wall.
- Ceiling.
- Tank.



Dimensions (mm)

RM-12S SINGLE ARM ALUMINIUM HOSE REELS

15 METERS MAXIMUM HOSE CAPACITY

Aluminium base and arms with composite spool hose reels, can handle up to $15 \text{ m} \times 1/2^{"}$ hose.





- Aluminium base and guide arm provide the rigidity to withstand the most demanding applications whilst offering a reduced weight for easy installation.
- Fatigue resistant steel spring for years of durable performance and even load when pulling and recoiling the hose.
- Full port shaft and swivel for no restrictions.
- Spool mounted on two permanent lubricated and sealed ball bearings to reduce torque load on spring for smooth retraction and longer life.
- Large effective radial latching area for easier operation.
- Round 6 roller hose outlet prevents hose pinching and reduced friction.
- Hose guide arm can be placed in different positions to accommodate any method of mounting.
- Hose reels with hose include 0,8 m inlet hose.

PART No.	BARE REEL	HOSE INSIDE DIAMETER	HOSE LENGTH	CONNECTING HOSE INLET	DELIVERY HOSE OUTLET	PRESSURE RATING	WEIGHT (With hose)				
AIR / WATER / ANTIFREEZE SOLUTIONS											
506 101	506 920.001	3/8"	10 m	3/8" BSP (M)	3/8" BSP (M)	20 bar	12,1 kg				
506 121	506 922.001	3/8"	15 m	3/8" BSP (M)	3/8" BSP (M)	20 bar	14,2 kg				
506 122	506 921.001	1/2"	15 m	1/2" BSP (M)	1/2" BSP (M)	20 bar	14,9 kg				
		WINDSHIELD AND	WINDSHIELD W	ASH SOLUTIONS / AdBlue [®] - D	EF / DETERGEN	NTS					
506 762	506 976	1/2"	10 m	1/2" BSP (M)	1/2" BSP (M)	20 bar	13 kg				
506 782	506 978	1/2"	15 m	1/2" BSP (M)	1/2" BSP (M)	20 bar	15,5 kg				
SYNTHETIC AND MINERAL OILS											
506 202	506 920	1/2"	10 m	1/2" BSP (M)	1/2" BSP (M)	160 bar	12,6 kg				
506 222	506 922	1/2"	15 m	1/2" BSP (M)	1/2" BSP (M)	160 bar	14,9 kg				
506 212*	506 921	1/2"	15 + 3 m	1/2" BSP (M)	1/2" BSP (M)	160 bar	15,7 kg				
			WA	STE OIL SUCTION							
506 503	506 950	5/8"	6 m	1/2" BSP (M)	1/2" BSP (M)	Vacuum	13,3 kg				
			GREASE	AND HYDRAULIC FLUID							
506 300	506 930	1/4"	10 m	1/4" BSP (M)	1/4" BSP (M)	400 bar	12,4 kg				
506 301	506 934	3/8"	10 m	3/8" BSP (M)	1/4" BSP (M)	400 bar	12,9 kg				
506 321	506 936	3/8"	15 m	3/8" BSP (M)	1/4" BSP (M)	400 bar	16 kg				
506 311*	506 935	3/8"	15 + 3 m	3/8" BSP (M)	1/4" BSP (M)	400 bar	17 kg				
			HIGH PRESSURE	HOT WATER (UP TO 100 °C)							
506 421	506 942	3/8"	15 m	3/8" BSP (M)	1/4" BSP (M)	170 bar	15,1 kg				

*15 + 3 m models shall be need in installations allowing a minimum of 3 m of hose hanging from the reel.



RM-12CL INDIVIDUALLY ENCLOSED HOSE REELS

507 202

FLUIDS HANDLED

• Air.

• Water.

- Antifreeze and Windshield Wash Solutions.
- High Pressure Hot Water.
- Synthetic and Mineral Oils.
- AdBlue[®] / DEF.
- Grease.

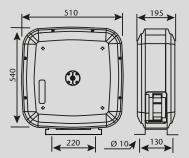
MARKETS / APPLICATIONS

- Car and truck dealers.
- Service shops.
- Fleets.
- General manufacturing.
- Service stations.
- Lube trucks.

MOUNTING

• Floor.

- Wall.
- Ceiling.
- Tank.



Dimensions (mm)



Aluminium enclosure with composite spool hose reels, can handle up to 15 m x 1/2" hose.



- Corrosion resistant aluminium shields form a very rigid and stable structure, with light weight and attractive design.
- Fatigue resistant steel spring for years of durable performance and even load when pulling and recoiling the hose.
- Full port shaft and swivel for no restrictions.
- Spool mounted on two permanent lubricated and sealed ball bearings to reduce torque load on spring for smooth retraction and longer life.
- Large effective radial latching area for easier operation.
- Positionable mounting brackets to accommodate any method of mounting.
- Two large lateral service windows facilitate common maintenance operations.
- Hose reels with hose include 0,8 m inlet hose.

PART No.	BARE REEL	HOSE INSIDE DIAMETER	HOSE LENGTH	CONNECTING HOSE INLET	DELIVERY HOSE OUTLET	PRESSURE RATING	WEIGHT (With hose)				
AIR / WATER / ANTIFREEZE SOLUTIONS											
507 101	507 920.001	3/8"	10 m	3/8" BSP (M)	3/8" BSP (M)	20 bar	18,4 kg				
507 121	507 922.001	3/8"	15 m	3/8" BSP (M)	3/8" BSP (M)	20 bar	20,7 kg				
507122	507 921.001	1/2"	15 m	1/2" BSP (M)	1/2" BSP (M)	20 bar	21,4 kg				
WINDSHIELD AND WINDSHIELD WASH SOLUTIONS / AdBlue [®] - DEF / DETERGENTS											
507 762	507 976	1/2"	10 m	1/2" BSP (M)	1/2" BSP (M)	20 bar	19 kg				
507 782	507 978	1/2"	15 m	1/2" BSP (M)	1/2" BSP (M)	20 bar	20,5 kg				
SYNTHETIC AND MINERAL OILS											
507 202	507 920	1/2"	10 m	1/2" BSP (M)	1/2" BSP (M)	160 bar	18,9 kg				
507 222	507 922	1/2"	15 m	1/2" BSP (M)	1/2" BSP (M)	160 bar	21,4 kg				
507 212*	507 921	1/2"	15 + 3 m	1/2" BSP (M)	1/2" BSP (M)	160 bar	22,2 kg				
			WA	STE OIL SUCTION							
507 503	507 950	5/8"	6 m	1/2" BSP (M)	1/2" BSP (M)	Vacuum	19,1 kg				
			GREASE A	AND HYDRAULIC FLUID							
507 300	507 930	1/4"	10 m	1/4" BSP (M)	1/4" BSP (M)	400 bar	18,8 kg				
507 301	507 934	3/8"	10 m	3/8" BSP (M)	1/4" BSP (M)	400 bar	19,5 kg				
507 321	507 936	3/8"	15 m	3/8" BSP (M)	1/4" BSP (M)	400 bar	22,6 kg				
507 311*	507 935	3/8"	15 + 3 m	3/8" BSP (M)	1/4" BSP (M)	400 bar	23,6 kg				
			HIGH PRESSURE	HOT WATER (UP TO 100 °C)							
507421	507 942	3/8"	15 m	3/8" BSP (M)	1/4" BSP (M)	170 bar	22,2 kg				

*15 + 3 m models shall be need in installations allowing a minimum of 3 m of hose hanging from the reel.



FLUIDS HANDLED

- Air.
- Water.
- Antifreeze and Windshield Wash Solutions.
- High Pressure Hot Water.
- Synthetic and Mineral Oils.
- Grease.

MARKETS / APPLICATIONS

- Car and truck dealers.
- Service shops.
- Fleets.
- Lube trucks.
- Mining and construction,.
- Railroad and mass transit vehicles.
- General manufacturing.

MOUNTING

- Floor.
- Wall.
- Ceiling.
- Tank.
- Dimensions (mm)

RM-12L HEAVY DUTY HOSE REELS

15 METERS MAXIMUM HOSE CAPACITY

Full metal Intensive Duty double pedestal hose reels, with hose capacity up to 15 m x 1/2" hose.



- Very tough construction able to stand regular use and abuse in Intensive Duty applications.
- Fatigue resistant steel spring for years of durable performance and even load when pulling and recoiling the hose.
- Full port shaft and swivel for no restrictions.
- Spool mounted on two permanent lubricated and sealed ball bearings to reduce torque load on spring for smooth retraction and longer life.
- Large effective radial latching area for easier operation.
- Hose guide arm can be placed in different positions to accommodate any method of mounting.
- Narrow footprint allows accommodating more reels on the same surface.
- Hose reels with hose include 0,8 m inlet hose.

		HOSE INSIDE DIAMETER	HOSE LENGTH	CONNECTING HOSE INLET	DELIVERY HOSE OUTLET	PRESSURE RATING	(With hose)
	AIR / WATER / ANTIFREEZE SOLUTIONS						
504 150 5	604 159	1/2"	15 m	1/2" BSP (M)	1/2" BSP(M)	20 bar	24 kg
SYNTHETIC AND MINERAL OILS							
504 250 5	604 259	1/2"	15 m	1/2" BSP(M)	1/2" BSP(M)	160 bar	24 kg
	GREASE AND HYDRAULIC FLUID						
504 350 504	4 359.001	1/4"	15 m	1/4" BSP(M)	1/4" BSP(M)	400 bar	27,5 kg
504 351 5	604 359	3/8"	15 m	3/8" BSP(M)	1/4" BSP(M)	400 bar	26 kg
HIGH PRESSURE HOT WATER (UP TO 100 °C)							
504 450 5	604 459	3/8"	15 m	3/8" BSP(M)	1/4" BSP(M)	170 bar	26 kg



RM-34 HEAVY DUTY HOSE REELS

505 224

FLUIDS HANDLED

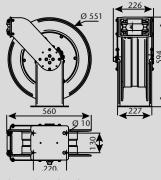
- Air.
- Water.
- Antifreeze and windshield wash solutions.
- Synthetic and mineral oils.
- AdBlue[®] / DEF.
- Waste Oil Evacuation.
- Diesel.
- Grease.

MARKETS / APPLICATIONS

- Truck dealers.
- Service shops.
- Fleets.
- Lube trucks.
- Mining and construction.
- Railroad and mass transit vehicles. General manufacturing.

MOUNTING

- Floor.
- Floor.
- Wall.
- Ceiling.Tank.
- Tank.



Dimensions (mm)

15 AND 20 METERS MAXIMUM HOSE CAPACITY

Full metal, Intensive Duty double pedestal hose reels with hose capacity up to 15 m x 3/4" and 20 m x 1/2" hose.



- Very tough construction able to stand regular use and abuse in Intensive Duty applications.
- Fatigue resistant steel spring for years of durable performance and even load when pulling and recoiling the hose.
- Full port shaft and swivel for no restrictions.
- Spool mounted on two permanent lubricated and sealed ball bearings to reduce torque load on spring for smooth retraction and longer life.
- Large effective radial latching area for easier operation.
- Hose guide arm can be placed in different positions to accommodate any method of mounting.
- Narrow footprint allows accommodating more reels on the same surface.
- Hose reels with hose include 0,8 m inlet hose.

PART No.	BARE REEL	HOSE INSIDE DIAMETER	HOSE LENGTH	CONNECTING HOSE INLET	DELIVERY HOSE OUTLET	PRESSURE RATING	WEIGHT (With hose)
AIR / WATER / ANTIFREEZE SOLUTIONS / DIESEL / LUBRICANTS							
505 232	505 932	1/2"	20 m	3/4" BSP (M)	1/2" BSP (M)	160 bar	36 kg
505 224	505 924	3/4"	15 m	3/4" BSP (M)	3/4" BSP (M)	125 bar	38 kg
AdBlue [®] - DEF / WINDSHIELD WASH SOLUTIONS / WASHING SOLUTIONS							
505 524	505 529	3/4"	15 m	3/4" BSP (M)	3/4" BSP (M)	20 bar	39 kg
GREASE AND HYDRAULIC FLUID							
505 332	505 339	1/2"	20 m	1/2" BSP (M)	1/2" BSP (M)	400 bar	39 kg



FLUIDS HANDLED

• Air.

• Water.

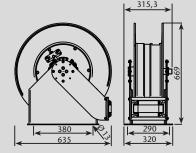
- Antifreeze solutions.
- Synthetic and mineral oils.
- Waste Oil Evacuation.
- Diesel.

MARKETS / APPLICATIONS

- Fleets.
- Lube trucks.
- Mining and construction.
- Railroad and mass transit vehicles.
- General manufacturing.

MOUNTING

- Floor.
- Tank.



Dimensions (mm)

RM-100 HEAVY DUTY LARGE CAPACITY HOSE REELS

15, 20, 25 AND 30 METERS MAXIMUM HOSE CAPACITY

Full metal, Intensive Duty, double pedestal hose reels, with hose capacity up to 15 m x 1", 20 m or 25 m x 3/4" hose and 30 m x 1/2" hose.



- Very tough construction large capacity reels, able to stand regular use and abuse in Intensive Duty applications.
- Fatigue resistant steel spring for years of durable performance and even load when pulling and recoiling the hose.
- Full port shaft and swivel for no restrictions.
- Spool mounted on two permanent lubricated and sealed ball bearings to reduce torque load on spring for smooth retraction and longer life.
- Large effective radial latching area for easier operation.
- Hose guide arm can be placed in different positions to accommodate any method of mounting.
- Narrow footprint allows accommodating more reels on the same surface.
- Hose reels with hose include 0,8 m inlet hose.

PART No.	BARE REEL	HOSE INSIDE DIAMETER	HOSE LENGTH	CONNECTING HOSE INLET	DELIVERY HOSE OUTLET	PRESSURE RATING	WEIGHT (With hose)
AIR / WATER / ANTIFREEZE SOLUTIONS / DIESEL							
508 125	508 925	1"	15 m	1" BSP (F)	1"BSP (F)	25 bar	50 kg
LUBRICANTS / WASTE OIL EVACUATION							
508 225	508 925	1"	15 m	1" BSP (F)	1"BSP (F)	90 bar	56 kg
508 234	508 924	3/4"	20 m	1" BSP (F)	3/4"BSP (F)	100 bar	55 kg
508 244	508 944	3/4"	25 m	1" BSP (F)	3/4"BSP (F)	100 bar	57 kg
508 252	508 942	1/2"	30 m	1" BSP (F)	1/2" BSP (F)	160 bar	55 kg



RM-150 HEAVY DUTY LARGE DELIVERY HOSE REELS

15 METERS MAXIMUM HOSE CAPACITY

Full metal, Intensive Duty, hose reel with hose capacity up to 15 m x 1-1/2" hose.

FLUIDS HANDLED

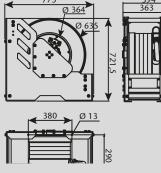
- Water.
- Diesel.

MARKETS / APPLICATIONS

- Fleets.
- Lube trucks.
- Mining and construction.
- Railroad and mass transit vehicles.
- General manufacturing.

MOUNTING

- Floor.
- Tank.



Dimensions (mm)



- Very tough construction large delivery reels, able to stand regular use and abuse in Intensive Duty applications.
- Fatigue resistant steel spring for years of durable performance and even load when pulling and recoiling the hose.
- Full port shaft and swivel for no restrictions.
- Spool mounted on two permanent lubricated and sealed ball bearings to reduce torque load on spring for smooth retraction and longer life.
- Large effective radial latching area for easier operation.
- Hose guide arm can be placed in two different positions to accommodate any method of mounting.
- Narrow footprint allows accommodating more reels on the same surface.
- Hose reels with hose includes 1 m inlet hose.

PART No.	BARE REEL	HOSE INSIDE DIAMETER	HOSE LENGTH	CONNECTING HOSE INLET	DELIVERY HOSE OUTLET	PRESSURE RATING	WEIGHT (With hose)
WATER / DIESEL							
508 810	508 890	1-1/2"	15 m	1-1/2" BSP (F)	1-1/2" BSP (F)	20 BAR	87 kg





COMPACT REELS FOR AIR AND CABLE

COMPACT REELS FOR AIR - RM-38 SERIES

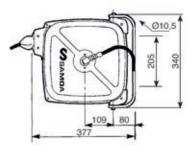
Compact enclosed reels for compressed air, manufactured in steel. All reels include pivoting wall bracket for an easy and convenient installation. Reels are supplied with PVC hose and they have a maximum working pressure of 15 bar (285 psi).

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

Compact reel for air 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 with 12 m x 10 mm hose. Includes 0.8 m inlet hose and pivoting bracket. Inlet thread: 3/8" BSP (M). Outlet thread: 3/8" BSP (M).



612 300 - 612 100



CABLE REELS - RM-POWER SERIES

Compact reels with high resistance thermoplastic enclosure. Compact design, with wide outlet for a comfortable and friction free cable extension. All reels include pivoting bracket, cable specified for each model, and cable overload breaker. For use with 230 V – 50 Hz only.



612 100 - 230 V, 50 Hz cable reel

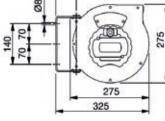
Includes 15 m H05VV-F 3x1,5 mm² cable, 230 V - 50 Hz. Maximum power: 800 W with the cable coiled and 2.000 W with the cable fully extended because of heat disipation.

612 200 - 230 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 230 V AC to 24 V DC transformer. For use with an E27 24 V - DC lamp (lamp not included).

612 300 - 230 V, 50 Hz cable reel with 230 V AC to 12 V DC transformer

Includes 15 m H05VV-F 2x1 mm² cable. Maximum power: 60 W Includes a 230 V AC to 12 V DC transformer. For use with an E27 12 V - DC lamp (inspection lamp included, bulb not included).







67 current

THREE HOSE REEL STAND

TWO HOSE REEL STAND

360 161 Two hose reel stand For use with any pair of RM12 hose reels. Height: 2.375 mm.

360 162 Three hose reel stand

For use with all RM12 models, includes drip tray. Dimensions: 1.200 x 400 x 2.220 mm.



HOSE REEL ACCESSORIES



The additional bracket allows mounting two additional hose reels on one side of a six reel stand 360 160 and 360 165.

360 168 Additional drip tray

For use on one side of a six reel stand 360 160 and 360 165 when equipped with the 360 166 additional bracket.

736 229 Drawers kit

The kit allows mounting two drawers with lock to the six reel stand 360 160.

FLUID DISPENSE GUNS AND METERS

CONTROL VALVES FOR OIL	70
ELECTRONIC METERED CONTROL VALVES FOR OIL	72
MECHANICAL METERED CONTROL VALVES FOR OIL	74
MECHANICAL METERED PRESET CONTROL VALVES FOR OIL	75
IN-LINE METERS	76
PULSE TRANSMITERS	
OTHER MIETERS AND ACCESSORIES	78
GREASE GUNS AND ACCESSORIES	79
OIL BARS, SPIGOT VALVES AND OTHER FLUID DISPENSE GUNS	80









CONTROL VALVES FOR OIL

PA40 - OIL CONTROL VALVE, 40 L/MIN

SAMOA control valves are used at end of hose assembly to control the delivery of lubricants and antifreeze solutions.

FLUIDS HANDLED

- Synthetic and mineral based lubricants.
- Gear Oil.
- Hydraulic oil and fluids.
- ATF.
- Antifreeze solutions.

MARKETS SERVED

- Car and truck dealerships.
- Fast lube and maintenance shops.
- Fleet service.
- Mining and construction.
- Lube trucks.

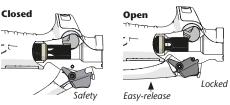
ROUGHNESS AND EXTRA PERFORMANCE

- Extensively and rigorously field tested for reliable performance in all situations.
- Aluminium body with light weight ergonomic design and soft grip handle for increased user's comfort.
- Cam and piston valve design for superb control and minimum flow resistance.
- Large port inlet swivel, with large surface screen inlet filter.
- Swivel and outlet covers, protect vehicles from nicks and scratches.
- Valves have safety latch, which must be depressed before material can be dispensed, and the trigger can be blocked in open position for dispensing large quantities of fluid.
- Large range of outlets to accommodate to every application.

TECHN	ICAL DATA
Maximum flow rate	40 l/min (11 gal/min)
Maximum working pressure	100 bar (1,450 psi)
Operating temperature range	-10 °C to 70 °C (14 to 160 °F)
Fluid inlet	1/2" BSP (F)
Fluid outlet	1/2" BSP (F)
Wetted parts	Aluminium / Zinc plated steel / TPU / Polyamide
Fluid compatibility	Lubricants, ATF, antifreeze (Glycol) and antifreeze water solutions
Weight	470 g (1 lb)

MODELS AVAILABLE					
PART No.	DESCRIPTION	INCLUDED OUTLET			
363 100	Oil valve with no outlet	-			
363 116	Oil valve with 60° rigid outlet and quarter turn non drip tip	369 232			
363 115	Oil valve with flexible outlet with 90° tube and automatic non-drip tip	369 230			
363 114	Oil valve with flexible outlet with $90^{\circ}\ \text{tube}$ and quarter turn non-drip tip	369 228			
363 112	Oil valve with flexible outlet and automatic non-drip tip	369 224			
363 117	Oil valve with formable outlet and quarter turn non-drip	369 234			
363 118	Oil valve with formable outlet and quarter turn narrow non-drip (Ø 8 mm)	369 241			

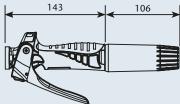
Non drip tips are manufactured in brass.



The new cam actuated piston-valve is designed for unrestricted flow and superb control. It incorporates an ergonomic trigger with safety, locking and easy-release functions.



REGISTERED DESIGN



Dimensions (mm)



CONTROL VALVES FOR OIL

PA70 - HIGH FLOW OIL CONTROL VALVE, 70 L/MIN

SAMOA large delivery control valves are used at end of hose assembly to control the delivery at large flow rates of lubricants and antifreeze solutions.

FLUIDS HANDLED

- Synthetic and mineral based lubricants.
- Gear Oil.
- Hydraulic oil and fluids.
- ATF.
- Antifreeze solutions.

• Truck dealerships.

- Fleet service.
- Mining and construction.
- Lube trucks.
- Railroad and mass transit vehicles.

ROUGHNESS AND EXTRA PERFORMANCE

- Extensively and rigorously field tested for reliable performance in all situations.
- Full metal control valve, manufactured in durable aluminium pressure cast body to stand the toughest working conditions.
- High flow pressure balanced valve for comfortable use.
- Large port inlet swivel (1" and 3/4"), with large surface screen inlet filter.
- Safety guard avoids accidental openings,

Trigger can be blocked in open position for dispensing large quantities of fluid.
Outlets have 3/4" BSP (M) connection thread and use a bonded seal to assure a leak free

Outlets have 3/4" BSP (M) connection thread and use a bonded seal to assure a leak fre
operation.

TECHN	ICAL DATA
Maximum flow rate	90 l/min (24 gal/min)
Maximum working pressure	100 bar (1,450 psi)
Operating temperature range	-10 °C to 70 °C (14 to 160 °F)
Fluid inlet	3/4" BSP (F) or 1" BSP (F)
Fluid outlet	3/4" BSP (F)
Wetted parts	Aluminium / Zinc plated steel and brass / NBR
Fluid compatibility	All type of synthetic and mineral oils, antifreeze solutions, hydraulic fluid
Weight	2,05 kg (4.5 lb)

ORDERING INFORMATION

363 053

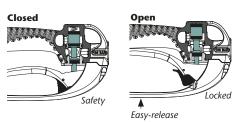
High volume oil gun with rigid outlet and non-drip tip. 3/4" BSP (F) inlet swivel. **363 054**

High volume oil gun with flexible outlet and non-drip tip. 3/4" BSP (F) inlet swivel. **363 055**

High volume oil gun with rigid outlet and non-drip tip. 1" BSP (F) inlet swivel.

363 056

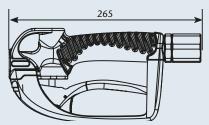
High volume oil gun with flexible outlet and non-drip tip. 1" BSP (F) inlet swivel.



The new pressure balanced spool valve is designed for unrestricted flow, superb control and comfortable use. The control valve incorporates hand-guard for safety and an ergonomic trigger with locking function.



REGISTERED DESIGN

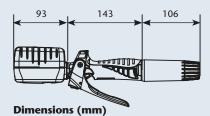


Dimensions (mm)





REGISTERED DESIGN



ELECTRONIC METERED CONTROL VALVES FOR OIL

EC30 - OVAL GEAR WITH DIGITAL DISPLAY HAND HELD METER, 30 L/MIN

SAMOA metered control valves are used at end of hose assembly to control measured delivery of lubricants and antifreeze solutions.

FLUIDS HANDLED

- Synthetic and mineral based lubricants.
- Gear Oil.
- Hydraulic oil and fluids.
- ATF.
- Antifreeze solutions.

MARKETS SERVED

- Car and truck dealerships.
- Fast lube and maintenance shops.
- Fleet service.
- Mining and construction.
- Lube trucks.

ACCURACY, ROUGHNESS AND EXTRA PERFORMANCE

- Extensively and rigorously field tested for reliable performance in all situations.
- High precision machined measure chamber with tight tolerances, quality gears and stainless
- steel shafts eliminate the need of frequent calibrations to adjust to fluid viscosity.
- Polycarbonate register housing provides superb impact resistance. Sealed battery compartment and isolated electronic register for extended life.
- Low power consumption power module with auto-sleep function for extended batteries life.
- Easy to read large character display, with batch, trip (resettable totalizer) and permanent
- totalizer functions for better control of lubricant use.
- Multiple units of measure: liters, quarts, pints and gallons.
- Rough TPE boot surrounds the entire meter for even greater durability.
- PA40 Control Gun is flanged coupled to eliminate the use of adaptors and eliminate leaks.

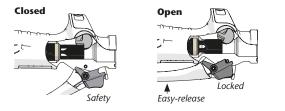
TECHNICAL DATA		
Maximum flow rate	30 l/min (8 gal/min)	
Accuracy	+/- 0,5 %	
Maximum working pressure	100 bar (1,450 psi)	
Operating temperature range	-10 °C to 60 °C (14 to 140 °F)	
Fluid inlet	1/2" BSP (F)	
Fluid outlet	1/2" BSP (F)	
Wetted parts	Acetal / Aluminium / Stainless steel / NBR / Zinc plated steel / TPU / Polyamide	
Fluid compatibility	Lubricants, ATF, antifreeze (Glycol) and antifreeze - water solutions	
Weight	1,30 kg (2.86 lb)	

MODELS AVAILABLE

HOSE END METER PART No.	OUTLET NOZZLE TYPE	OUTLET NOZZLE PART No.
365 521	Hose end meter with no outlet	-
365 536	60° rigid with quarter turn opening non-drip tip	369 232
365 535	Flexible outlet with 90° angled nozzle with automatic non-drip tip	369 230
365 534	Flexible outlet with 90° angled nozzle with quarter turn opening non-drip tip	369 228
365 532	Flexible outlet with automatic non-drip tip	369 224
365 537	Formable outlet with quarter turn opening non-drip tip	369 234
365 538	Formable outlet with quarter turn opening narrow non-drip tip (Ø 8 mm)	369 241

Non drip tips are manufactured in brass.

Н



The new cam actuated piston-valve is designed for unrestricted flow and superb control. It incorporates an ergonomic trigger with safety, locking and easy-release functions.



ELECTRONIC METERED CONTROL VALVES FOR OIL

EC70 - OVAL GEAR WITH DIGITAL DISPLAY HAND HELD HIGH FLOW METER, 70 L/MIN

SAMOA High Flow metered control valves are used at end of hose assembly to control measured delivery of lubricants and antifreeze solutions done at high flow rates.

FLUIDS HANDLED

- Synthetic and mineral based lubricants.
- Gear Oil.
- Hydraulic oil and fluids.
- ATF.
- Antifreeze solutions.

MARKETS SERVED

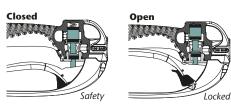
- Ttruck dealerships.
- Fleet service.
- Mining and construction.
- Lube trucks.
- Railroad and Mass Transit Vehicles.

ACCURACY, ROUGHNESS AND EXTRA PERFORMANCE

- Extensively and rigorously field tested for reliable performance in all situations.
- High precision machined measure chamber with tight tolerances, quality gears and stainless
- steel shaft eliminate the need of frequent calibrations to adjust to fluid viscosity.
- Polycarbonate register housing provides superb impact resistance. Sealed battery compartment and isolated electronic register for extended life.
- Low power consumption electronic module with auto-sleep function for extended battery life.
- Easy to read large character display, with batch, trip (resettable totalizer) and permanent
- totalizer functions for better control of lubricant use.
- Multiple units of measure: liters, quarts, pints and gallons.
- Rough TPE boot surrounds the entire meter for even greater durability.
- PA70 Control Gun contributes to large flow delivery with no restrictions.

TECHNICAL DATA		
Maximum flow rate	70 l/min (19 US gal/min)	
Accuracy	+/- 0,5%	
Maximum working pressure	100 bar (1,450 psi)	
Operating temperature range	-10 °C to 60 °C (14 to 140 °F)	
Fluid inlet	3/4" BSP (F) or 1" BSP (F)	
Fluid outlet	3/4" BSP (F)	
Wetted parts	Acetal / Aluminium / Stainless steel / Zinc plated steel and brass / NBR	
Fluid compatibility	Oil	
Weight	2,85 kg (6.30 lb)	

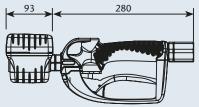
MODELS AVAILABLE		
HOSE END METER PART No.	OUTLET NOZZLE TYPE INLET SWIV THREAD	
365 655	30° rigid with semiautomatic non-drip tip	3/4" BSP (F)
365 654	Flexible outlet with semiautomatic non-drip tip	3/4" BSP (F)
365 657	30° rigid with semiautomatic non drip tip	1" BSP (F)
365 656	Flexible outlet with semiautomatic non drip tip	1" BSP (F)



The new pressure balanced spool valve is designed for unrestricted flow, superb control and comfortable use. The control valve incorporates hand-guard for safety and an ergonomic trigger with locking function.



REGISTERED DESIGN



Dimensions (mm)



MECHANICAL METERED CONTROL VALVES FOR OIL

MC30 - ROTARY PISTON HAND HELD METER, 30 L/MIN

SAMOA mechanical metered control valves are used at end of hose assembly to control measured delivery of lubricants and antifreeze solutions in tough, intensive use applications.

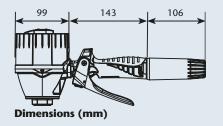
FLUIDS HANDLED

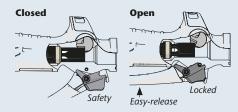
- Synthetic and mineral based lubricants.
- Gear Oil.
- Hydraulic oil and fluids.
- ATF.
- Antifreeze solutions.

MARKETS SERVED

- Car and truck dealerships.
- Fast lube and maintenance shops.
- Fleet service.
- Mining and construction.
- Lube trucks.
- Railroad and Mass Transit Vehicles.







The new cam actuated piston-valve is designed for unrestricted flow and superb control. It incorporates an ergonomic trigger with safety, locking and easy-release functions.

ACCURACY, ROUGHNESS AND EXTRA PERFORMANCE

- Extensively and rigorously field tested for reliable performance in all situations.
- No calibration required. Precision machined metering chamber keeping tight tolerances. High accuracy within a large viscosity range.
- One piece polycarbonate based integral register housing and single molded pointer knob to guarantee maximum integrity of the meter against drops and impacts and provides superb protection against humidity.
- Fully mechanical register.

М

- Simple and easy to read dial includes 5-digit totalizer
- Very rough metal construction, the meter is ideal for intensive use and outdoor applications.
- PA40 Control Gun is flanged coupled to eliminate the use of adaptors and eliminate leaks.

TECHNICAL DATA		
Maximum flow rate	30 l/min (8 gal/min)	
Accuracy	+/- 0,65 %	
Maximum working pressure	100 bar (1,450 psi)	
Operating temperature range	-10 °C to 60°C (-14 to 140 °F)	
Fluid inlet	1/2" BSP (H)	
Fluid outlet	1/2" BSP (H)	
Wetted parts	Aluminium / Zinc alloy / Stainless steel / NBR / Brass / Steel / TPU / Polyamide	
Fluid compatibility	Synthetic and mineral oils, ATF, Antifreeze, Gear oils	
Weight	1,7 kg (3.74 lb)	

MODELS AVAILABLE

HOSE END ETER PART No.	OUTLET NOZZLE TYPE	OUTLET NOZZLE PART No.
ME	TRIC METERS. 0 - 10 Liters dial, Totalizer in Liters - Lubrican	ts
365 801	No outlet. Includes inlet swivel with shroud	-
365 803	Flexible outlet with automatic non-drip tip	369 224
365 804	Flexible outlet with quarter turn opening non-drip tip	369 234
METRIC METERS. 0 - 10 Liters dial, Totalizer in Liters - Antifreeze		
365 824	Flexible outlet with quarter turn opening non-drip tip	369 234
QUARTS/GALLONS METERS. 4 - 16 Quarts dial, Totalizer in Gallons - Lubricants		
365 802	No outlet. Includes inlet swivel with shroud	-
365 805	Flexible outlet with automatic non-drip tip	369 224
365 806	Formable outlet with quarter turn opening non-drip tip	369 234
QUARTS/GALLONS METERS. 4 - 16 Quarts dial, Totalizer in Gallons - Antifreeze		
365 826	Flexible outlet with quarter turn opening non-drip tip	369 234

Non drip tips are manufactured in brass.

All models include inlet swivel with shroud and the outlet listed for each model.



MECHANICAL METERED PRESET CONTROL VALVES FOR OIL

MC30 - ROTARY PISTON HAND HELD PRESET METER, 30 L/MIN

SAMOA mechanical preset metered control valves allow automatic filling of large crankcases, engines and other lubricant reservoirs. For automatic operation, set the dial pointer to the quantity needed, actuate the trigger for automatic latching and the valve will deliver exactly the volume required and then shut off.

FLUIDS HANDLED

- Synthetic and mineral based lubricants.
- Gear Oil.
- Hydraulic oil and fluids.ATF.

MARKETS SERVED

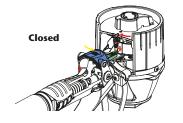
- Truck dealerships.
- Fleet service.
- Mining and construction.
- Lube trucks.
- Railroad and Mass Transit Vehicles.

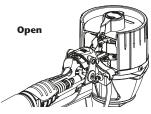
ACCURACY, ROUGHNESS AND EXTRA PERFORMANCE

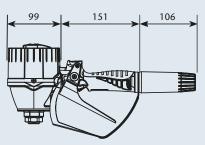
- Extensively and rigorously field tested for reliable performance in all situations.
- No calibration required. Precision machined metering chamber keeping tight tolerances. High accuracy within a large viscosity range.
- One piece polycarbonate based integral register housing and single molded pointer knob to guarantee maximum integrity of the meter against drops and impacts and provides superb protection against humidity.
- The reset mechanism incorporates a safety clutch for preserving the preset mechanism in case of turning the knob in the wrong direction.
- The shut off mechanism is purely mechanical and thus eliminates all hassles from low power batteries, misaligned servo-motors, and other delicate mechanisms. High wear and stress resistant shut off mechanism with no tiny and easy to bend small metal parts.
- Simple and easy to read dial includes 5-digit totalizer
- Very rough metal construction, the meter is ideal for intensive use and outdoor applications.
- PA40 Control Gun is flanged coupled to eliminate the use of adaptors and eliminate leaks.

TECHNICAL DATA		
Maximum flow rate	30 l/min (8 US gal/min)	
Accuracy	+/- 0,65 %	
Maximum working pressure	100 bar (1,450 psi)	
Operating temperature range	-10 °C to 60 °C (14 to 140 °F)	
Fluid inlet	1/2" BSP (H)	
Fluid outlet	1/2" BSP (H)	
Wetted parts	Aluminium / Zinc alloy / Stainless steel / NBR / Brass / Steel / TPU / Polyamide	
Fluid compatibility	Synthetic and mineral oils, ATF, Antifreeze	
Weight	2 kg (4.40 lb)	

MODELS AVAILABLE		
HOSE END METER PART No.	o. OUTLET NOZZLE TYPE OUTLET NO PART N	
	METRIC METERS. 0 - 60 liters dial, totalizer in liters	
365 811	Rigid outlet with semiautomatic non drip tip 369 244	
QUARTS/GALLONS METERS. 0 - 60 quarts dial, totalizer in gallons		
365 812	365 812 Rigid outlet with semiautomatic non drip tip 369 244	
QUARTS/GALLONS METERS. 0 - 60 gallons dial, totalizer in gallons		
365 813	Rigid outlet with semiautomatic non drip tip	369 244







Dimensions (mm)



366 000 - 366 010 - 366 020







REGISTERED DESIGN

366 060



REGISTERED DESIGN

IN-LINE METERS

1/2" IN-LINE METERS C30, 30 - 50 L/MIN

Oval gear meters for use as in-line meters with oil, DEF / AdBlue[®], windshield wash solution or anti-freeze solution, depending on the meter wetted materials. They can be wall mounted in the fluid line or at the pump outlet.

Meters include an electronic register controlled by wetted magnets and powered with two AAA alkaline batteries. It is shock proof and isolated from the fluid handled. Meter display is multifunction, showing the volume dispensed per delivery, and has a permanent and a resettable (trip function) totalizers. The display can be programmed to show delivery in liters, quarts, pints and US gallons. The assembly is enclosed in TPE moulded shroud.

MODELS AND TECHNICAL DATA			
	366 000	366 010	366 020
Wetted parts	ALUMINIUM, acetal, AISI 316 stainless steel, NBR	PVC , acetal, AISI 316 stainless steel, Viton [®]	AISI 316 STAINLESS STEEL , acetal, Viton [®]
Applications	Medium pressure dispense of lubricants up to 5.000 mPa	Low pressure dispense of DEF / AdBlue [®] , windshield wash and antifreeze solutions	Medium pressure dispense of DEF / AdBlue®, windshield wash and antifreeze solutions
Connection threads	1/2" BSP (F)	1/2" BSP (F)	1/2" BSP (F)
Flow range	1 - 30 l/min	1 - 50 l/min	1 - 50 l/min
Pulses per liter	164 ppl	150 ppl	164 ppl
Accuracy	+/- 0.5 %	+/- 0.5 %	+/- 0.5 %
Maximum operating pressure	100 bar	30 bar	100 bar
Temperature range (fluid)	-10 °C to 60 °C	-10 °C to 60 °C	-10 °C to 70 °C
Calibration	Can be calibrated	Can be calibrated	Can be calibrated
Weight	0,53 kg	0,50 kg	0,85 kg

3/4" HIGH VOLUME IN-LINE METER C70, 80 L/MIN

Oval gear meter for use as in-line meters with oil or diesel. It can be wall mounted in the fluid line or at the pump outlet.

Meter includes an electronic register controlled by wetted magnets and powered with two AAA alkaline batteries. It is shock proof and isolated from the fluid handled and the display is multifunction, showing the volume dispense per delivery and has a permanent and a resettable (trip function) totalizers. The display can be programmed to show delivery in liters, quarts, pints and US gallons. The assembly is enclosed in TPE moulded shroud. It can also be set to show the flow rate in units of measure per minute.

MODELS AND TECHNICAL DATA		
	366 060	
Wetted parts	ALUMINIUM, acetal, AISI 316 stainless steel, NBR	
Applications	Medium pressure dispense of diesel and lubricants up to 5.000 mPa	
Connection threads	3/4" BSP (F)	
Flow range	8 - 80 l/min	
Pulses per liter	109 ppl	
Accuracy	+/- 0.5 %	
Maximum operating pressure	100 bar	
Temperature range (fluid)	-10 °C to 60 °C	
Calibration	Can be calibrated	
Weight	0,80 kg	



PULSE TRANSMITERS

366 050 - 366 053 - 366 055







REGISTERED DESIGN

366 057



REGISTERED DESIGN

1/2" PULSE TRANSMITTERS, 30 - 50 L/MIN

Oval gear meters for use as in-line meters for oil, DEF / AdBlue®, windshield wash solution or antifreeze solution lines depending on the meter wetted materials. They can be wall mounted in the fluid line or at the pump outlet.

Meters are shock proof and isolated from the fluid handled and the assembly is enclosed in a TPE moulded shroud.

Meter has a led light that indicates when the solenoid valve linked with the meter is open when used in an Inventory Management System.

MODELS AND TECHNICAL DATA			
	366 050	366 053	366 055
Wetted parts	ALUMINIUM, acetal, AISI 316 stainless steel, NBR	PVC , acetal, AISI 316 stainless steel, Viton [®]	AISI 316 STAINLESS STEEL , acetal, Viton [®]
Applications	Medium pressure dispense of lubricants up to 5.000 mPa	Low pressure dispense of DEF / AdBlue [®] , windshield wash and antifreeze solutions	Medium pressure dispense of DEF / AdBlue®, windshield wash and antifreeze solutions
Connection threads	1/2" BSP (F)	1/2" BSP (F)	1/2" BSP (F)
Flow range	1 - 30 l/min	1 - 50 l/min	1 - 50 l/min
Pulses per liter	328	300	328
Accuracy	+/- 0.5 %	+/- 0.5 %	+/- 0.5 %
Maximum operating pressure	100 bar	30 bar	100 bar
Temperature range (fluid)	-10 °C to 60 °C	-10 °C to 60 °C	-10 °C to 70 °C

3/4" HIGH VOLUME PULSE TRANSMITTER, 80 L/MIN

Oval gear meter for use as in-line meters for oil and diesel. It can be wall mounted in the fluid line or at the pump outlet. Double reed switch circuit board makes possible detecting when meter counts backwards.

Meters are shock proof and isolated from the fluid handled and the assembly is enclosed in a TPE moulded shroud.

Meter has a led light that indicates when the solenoid valve linked with the meter is open when used in an Inventory Management System.

MODELS AND TECHNICAL DATA		
	366 057	
Wetted parts	ALUMINIUM, acetal, AISI 316 stainless steel, NBR	
Applications	Medium pressure dispense of diesel and lubricants up to 5.000 mPa $$	
Connection threads	3/4" BSP (F)	
Flow range	8 - 80 l/min	
Pulses per liter	109	
Accuracy	+/- 0.5 %	
Maximum operating pressure	100 bar	
Temperature range (fluid)	-10 °C to 60 °C	



OTHER METERS AND ACCESSORIES



PRESET DIGITAL 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 once the preset volume is delivered. Meter with digital display, works with four easy to replace 1,5 V AAA alkaline batteries. Includes inlet swivel and rigid outlet with non drip nozzle.

BASED FLUIDS

365 575 Hose end meter for water based fluids Oval gear hose end meter with electronic display for measured delivery of windshield washer, coolant and antifreeze solutions. Display is powered with two easy to replace 1,5 V AAA alkaline batteries. Meter can measure in liters, quarts, pints and US gallons. The meter is flange coupled delivery gun 186 300.

Fluid inlet: 1/2" BSP (F). Maximum flow: 30 l/min. Maximum working pressure: 30 bar.

Operating temperature range: 10 to 60 °C (14 to 140 °F).

BASED FLUIDS

186 300 Delivery gun for water based fluids Delivery gun with reinforced polyamide body and stainless steel valve mechanism for use with fluids like windshield wash solutions, glycol solution (anti-freeze and other water based solutions. Includes brass inlet swivel with 1/2" BSP (F) connection thread and flexible outlet with 90° angled nozzle with quarter turn opening / closing non-drip tip.





ACCESSORIES 1/2" CONNECTION THREAD OUTLETS

They fit all metered and non-metered oil guns EC30, PA40, MC30 and MP30. Connection thread: 1/2" BSP (M). Non drip tips are manufactured in brass.

- **369 224** Flexible outlet with automatic opening / closing non-drip tip.
- 369 228 Flexible outlet with 90° angled nozzle with quarter turn opening / closing non-drip tip.
- **369 230** Flexible outlet with 90° angled nozzle with automatic opening / closing non-drip tip
- **369 232**, 60° rigid outlet with quarter turn opening / closing non-drip tip.
- 369 234 Formable outlet with quarter turn opening / closing non-drip tip.
- 369 241 Formable outlet with quarter turn opening / closing narrow (Ø 8 mm) non-drip tip.
- 369 244 Rigid straight outlet with semiautomatic non-drip tip. For MP30 mechanical preset meter.

369 606 Pack of four color coded protectors. For mounting at the EC30 meters and PA40 oil gun outlets.



ACCESSORIES 3/4" CONNECTION THREAD OUTLETS

They fit all EC70 and PA70 metered and non-metered guns. Connection thread: 3/4" BSP (M) and bonded washer seal.

369 236 Flexible outlet with semiautomatic non-drip tip. **369 237**, 30° angled rigid outlet with semiautomatic non-drip tip.



415 002



415 000 High pressure grease electronicmetered control gun Includes:

Z-swivel, with no outlet accessories.

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

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

Outlet thread: 1/8" BSP (F).

414 300 - 414 100



GREASE CONTROL GUN SWIVELS

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).

rigid outlet and 3 jaw connector assembly

Grease control gun with 450 mm double steel

braid reinforced rubber hose (PN 140 050) with

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

140 050 - 741 300

413 081 Grease control gun

3 jaw connector (PN 121 050).

(PN 741 300).

(PN 121 050).

GREASE CONTROL GUN OUTLETS

741 306 Rigid outlet with hydraulic grease connector.

741 300 Rigid outlet with 3 jaw hydraulic grease connector (121 050).

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

741 304 Rigid outlet.

411 100



OVAR GEAR IN LINE GREASE METER WITH ELECTRONIC DIGITAL DISPLAY

411 100 In line grease meter

High pressure oval gear meter with digital display. Batch display in grams (up to 99999 gr) and permanent totalizer in kilograms (up to 999999 kg). 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).



OIL BARS, SPIGOT VALVES AND OTHER FLUID DISPENSE GUNS

361 200 - 361 100

186 000 - 185 001 - 186 010

187 000 - 187 001



OIL BAR AND SPIGOT VALVE

361 200 Oil bar

Oil bar to dispense up to four products. Delivered with one outlet, up to three additional outlets can be mounted. **361 110 Additional outlet for oil bars 366 550 In-line meter kit for oil bars 361 100 Oil spigot valve**

For connecting to pumps outlet. Connection thread 3/4" BSP (M).

188 000 - 188 100



WATER GUNS

For use only with water and antifreeze solutions.

186 000 Water gun Maximum working pressure 10 bar, connection thread 1/4" BSP (F).

186 010 Water bib Maximum working pressure 10 bar, connection thread 1/4" BSP (F)

185 001 Wash gun Maximum working pressure 30 bar, connection thread 1/2" BSP (F).

184 200 - 184 201



INDUSTRIAL QUALITY BLOW GUNS

Aluminium blow guns with anti-slide grip. High air flow and wide range of accessories. Maximum minimum pressure: 3 to 8 bar, connection thread: 1/4" BSP (F). Includes extra-quite nozzle.

188 000 Heavy Duty blow gun 188 100 Compact blow gun

Blow guns accessories:
180 801 High flow nozzle
180 802 Extra-quite nozzle (standard in Industrial Quality blow guns).
180 803 Anti splash protection
180 800, 150 mm extension tube
Two or more tubes can be combined for getting an extra large tube.



THERMOPLASTIC BLOW GUNS

184 200 Thermoplastic blow gun 1/4" BSP (F).
184 201 Thermoplastic blow gun with flow regulator 1/4" BSP (F).



SPRAY GUNS

187 000 Spray gun

Min. - max. pressure: 3 to 10 bar, connection thread 1/4" BSP (F). Aluminium gun body and 1 liter aluminium container.

187 001 Spray gun

Min. - max. pressure: 3 to 10 bar, connection thread 1/4" BSP (F). Aluminium gun body, metal outlet and 1 liter plastic container.

184 000 Spray gun

Min. - max. pressure: 4 to 10 bar, connection thread 1/4" BSP (F). Plastic gun body, metal outlet and 0.75 liter plastic container.

184 050 Spray gun

Min.- max. pressure: 4 to 10 bar, connection thread 1/4" BSP (F). Plastic gun body, plastic outlet and 0,75 liter plastic container.

199 800



TIRE INFLATOR GUNS

195 100 Approved tire inflator

Tire inflator approved following 86 / 217 CEE directive. 500 mm rubber hose with connecting clip.

Connection thread: 1/4" BSP (F). 199 800 Standard tire inflator

650 mm rubber hose with connecting clip. Connection thread: 1/4" BSP (F).

INVENTORY MANAGEMENT SYSTEMS

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PRESET DOSING MODULE	90







ADVANCED MONITORING SYSTEM

AMS - INVENTORY MANAGEMENT CONTROL SYSTEM

It is more than likely that your stock control for parts and consumables is well established, with charges for those items passed to customers as a matter of course. But can you reconcile your oil purchases and oil sales and consumption? Do you know where every liter of oil is used? Do you know how much just «disappears»? With current retail oil prices for sure it is worth to find out.

SAMOA Advanced Monitoring System (AMS) is an Inventory Management Control System that puts you in total control of the fluids usage for any vehicle servicing activity. With this system, and when used in combination with efficient pumps, hose reels, dispense valves and other SAMOA lubrication equipment, you can reliably manage all the fluids used in your shop: lubricants, AdBlue®/DEF, windshield wash, coolants, diesel, etc. Depending on your fluids usage, you will be surprised how the entire system can pay for itself. After this period, the system contributes to increase your operation profitability.

AMS is a hard wired system, providing efficient and reliable data and power transmission among all the system components. All hassles coming from wireless communications and interferences from other machinery in the workshop are removed as well as power drop offs a consequence of low batteries.

The entire system can be controlled through a PC using a PC interface and communications adaptor together with special software (AMS Win PC). The AMS system can also integrate the Advanced Tank Management System (TRM or ATS). This allows an accurate and real time control of the inventories and an automatic update whenever lubricants are delivered. The AMS also has the possibility to communicate with the workshop Data Management System using an additional software module (ACP).

From the simplest entry level console to the most sophisticated computerized management system, we can supply the equipment required for the Professional Management of both new and used fluids.



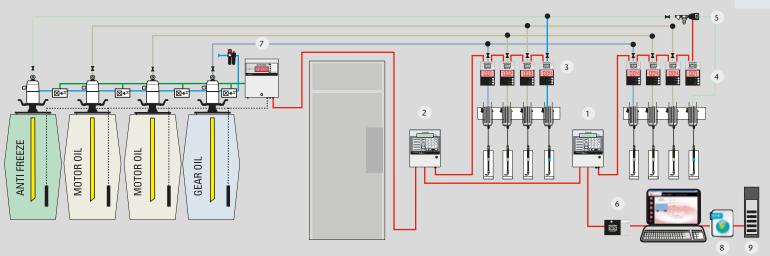




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ADVANCED MONITORING SYSTEM



- 1 AMS, ACCESS KEYPAD WITH AMM, APPLICATION SOFTWARE MEMORY MODULE (PN 381 000 + PN 381 600).
- 2 AMS, ACCESESS KEYPAD WITHOUT PRINTER (PN 381 000).
- 3 IFCU, INTELLIGENT FLOW CONTROL UNIT (PN 381 500).
- 4 IFDM, INTELLIGENT FLUID DISPENSE MANAGER (PN 381 550).
- 5 FCU, FLUID CONTROL UNIT FOR FLUIDS (380 551).
- 6 NTPC, NETWORK PROTOCOL CONVERTER (PN 381 351 BASIC), (PN 381 352 PROFESIONAL), (PN 381 353 PREMIUM).
- 7 TRM, TANK ROOM MANAGER (PN 382 100 + PN 382 120).
- 8 ACP PLATFORM (PN 381 66X).
- 9 DMS, DATA MANAGEMENT SYSTEMS SERVER.

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 have access to innovative functions such as: automatic identification by coded key, multi-fluid delivery under one work order and top up option on request.
- **B The supervisor**, who will have access to a wide variety of parameters that will allow him to set up the system management criteria which best meets his specific needs. Through easy to use PC software, he will be able to modify operator authorizations, adjust tank levels and access a wide range of statistics.
- C The installer, he will be able to easily install and set up the system. Directly connected to the main electricity supply (115 / 230 VAC), the AMS keypad has an internal 24 VDC power supply that provides the electrical power to between 1 and 8 outlets maximum, depending on the distance. The number of keypads in a system depends on the layout of the workshop and is not limited. The AMS can manage up to 100 outlets, each equipped with an Intelligent Flow Control Unit.





ADVANCED MONITORING SYSTEM. BASIC COMPONENTS

381 000 - 381 600 - 381 950



ACCESS KEYPAD

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 (PN 381 600): One software memory module is required for each installation.

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

381 000 AMS Access keypad (Voltage input: 115 - 230 VAC)

381 600 AMM, 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.

381 950 Cable for Can Bus, 1 m



INTELLIGENT FLOW CONTROL UNIT (IFCU)

The IFCU controls all parameters related with the distribution of fluids and integrates in one single module 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 high visibility display that shows the volume dispensed during the transaction and the outlet number when the outlet is not in use.
- 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).

381 500 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).

AMS WIN PC 3.0 + NETWORK PROTOCOL CONVERTER (NPTC)

381 352

The network protocol converter allows reliable communication with a PC through an USB connector.

The AMS Win PC software is delivered with the NTPC. The software runs on a WINDOWS operating system and uses ACCESS database.

THREE LEVELS / VERSIONS OF SOFTWARE

381 351 Basic version

This version allows:

- System parameters configuration.
- Declining balance Inventory Control and manual adjustment.
- List and sort of transaction.

381 352 Professional version

Includes all features in Basic version Plus: • Automatic, real time, inventory control and

- adjustment using additional TRM or ATS.
- Export transactions to an excel file.

381 353 Premium version

Includes all features in Professional version Plus:

- Unlimited transactions prepared in advance (VPT).
- DMS Integration using ACP (.TXT; OBDC; XML).









ADVANCED COMMUNICATION PLATFORM AND ACCESSORIES

ACP INTERFACE (WEB SERVICE)

- The ACP program allows the AMS Win PC Software to interconnect with the most popular data management systems (DMS) in the market, offering an efficient bidirectional communication.
- Web service interface developed using communication standards (SAOP, XML, WSDL).
- Single or multiple validation of transactions (ex: Job Number, Oil Type, Liters, etc.).
- Export of all transactions data to the customer DMS.
- Other communication formats available (only single validation), such as: Text Files (.TXT) or Database (.ODBC)
- Contact your SAMOA Distributor who will assist you with the ACP software you need.

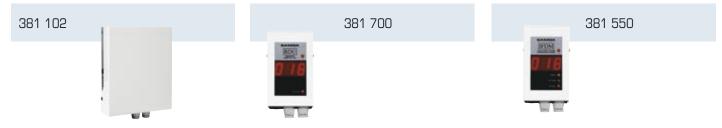
VALIDATION, Single or multiple fields



DATA EXPORT TO DMS, Transaction







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 or if the distance between the keypad and the last IFCU is too long.

381 700 Remote display unit (RDU)

High visibility 3-digit 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.

381 550 Intelligent fluid dispenser Manager (IFDM)

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.



- 381 901 Bar coded reader
- **381 200 Thermal ticket printer** Ticket printer for installation inside the access keypad.
- 381 950 Cable for CAN bus Comunications cable to connect system elements, adequate in most installations.
- 736 353 Wall bracket for 381 000 or 381 001 Keypads for wall mounted applications.
- 381 912 IFCU bracket for open reels (501 and 504 series) for wall mounted applications.
- **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 736 349 when no IFCU is installed.





382 120



389 013



TANK LEVEL CONTROL SOLUTIONS

TANK ROOM MANAGER

Control module to monitor the volume in up to four tanks using barometric level sensors. The level sensors provide accurate measurement of the volume in each tank. The system can work as a standalone unit (TRM S/A) or as part of the Advanced Monitoring System AMS (TRM-NET). Four System modules can be connected together to monitor up to 16 tanks.

TRM-NET

When used with an AMS system, the TRM-NET is connected directly via the CAN-BUS network to any keypad of the installation (AMM version 3.1.3 or higher) and it transmits automatically accurate real time information about the level in the oil tanks increasing system security and reliability of the oil inventories. This way manual inventory adjustment is no longer required, for example when new oil is supplied into a tank.

Additionally the TRM-NET can open and close the compressed air supply valves up to four individual air operated pumps (using solenoid valves PN 389 013 or PN 389 012) securing that the fluid pipe line will be under pressure only when there is a request of fluid coming from one of the keypads. The TRM-NET can also control one general air solenoid valve.

382 100 Tank Management System module TRM-NET

382 120 Level sensor

Tank maximum depth 400 cm.

389 013 Compressed air solenoid valve, 1/2" **BSP (FF)** 10 bar working pressure. For PM4, PM45 and PM60 pumps.

389 012 Compressed air solenoid valve, 1/4" BSP (FF)

10 bar working pressure. For PM2 pumps.

TRM-S/A

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 minimum alert levels. Optionally, the TRM S/A can be controlled and set up from a PC using the AMS-WinPC Professional software pack (PN 382 352) that includes the network protocol converter (NTPC) to communicate with a PC through a USB serial port.

382 101 Tank Management System module TRM S/A

382 110 Tank Management System access keypad

382 120 Level sensor Tank maximum depth 400 cm.

381 352 PC software kit Includes software and NTPC.





Product specifications are subject to change without prior notice



TANK LEVEL CONTROL SOLUTIONS

382 001







382 005





TANK ALERT SYSTEM

Protects the waste oil tanks from overflow and the air operated pumps for new oil tanks from running dry. The module can accept up to four tank level contact 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 LED indicators and an acoustic alarm signal warning when each of the tanks reaches a critical level. It has two 24 V outlet for controlling solenoid valves and one 12 V outlet for connecting to a remote flash and acoustic alarm (PN 382 005).

The system can work as a stand-alone unit (ATS Basic+) or as part of the Advanced Monitoring System AMS (ATS-NET).

ATS Basic+

When used as a stand-alone unit, the system can control up to two solenoid valves. On a waste oil tank it prevents overflow by closing a driven valve (PN 389 020). With new oil tanks it can open and stop the compressed air supply to the air operated pumps (using a solenoid valve PN 389 013) preventing the pumps from running dry.

382 001 Tank Alert stand alone module

382 201 Height adjustable contact level sensor

With 5 m cable and 2"BSP (M) connection.

382 005 Remote flash and acoustic alarm

389 020 Driven valve 1 1/2" BSP (F) kit

Air solenoid valve 24 VAC included. For controlling waste oil delivery into the waste oil storage tank.

ATS-NET

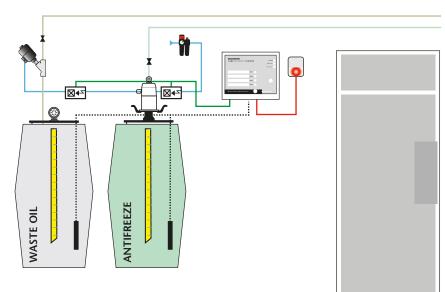
When used with an AMS system, the ATS-NET is connected directly via the CAN-BUS network to any keypad of the installation (AMM version 3.1.3 or higher) and it transmits automatically an alarm signal, increasing system security, and preventing running out of stock. Additionally the ATS-NET can open and close the general compressed air supply to all air operated pumps (using a solenoid valve PN 389 013).

382 050 Tank Alert module ATS-NET

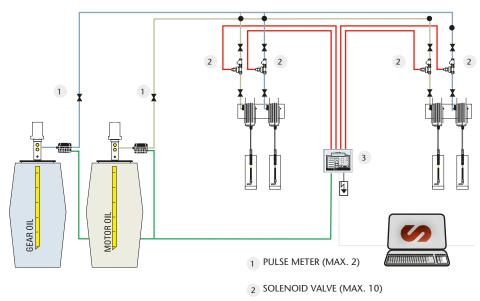
382 201 Height adjustable contact level sensor With 5m cable and 2"BSP(M) connection.

382 005 Remote flash and acoustic alarm

389 013 Compressed air solenoid valve



INVENTORY MANAGEMENT CONSOLE



3 KEYPAD MODULE

This single keypad system 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 of 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 or 230 VAC mains power.
- Can work with metric or US units of measure.



IMC COMPONENTS

381 002 Inventory management console module - 230 V

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.

381 004 Inventory management console module - 115 V

Same as 381 002 for 115 V.

381 003 Inventory management console module with PC connection - 230 V

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 vendor or shop Purchasing Department with an email when the oil inventory level is low.

381 005 Inventory management console module with PC connection - 115 V Same as 381 003 for 115 V.



366 050, 1/2" Pulse meter for oil

Oval gear meter for use with oil, or antifreeze. Meters are shock proof and isolated from the fluid handled and the assembly is enclosed in a PTE molded shroud. For being connected at each pump outlet. Inlet - Outlet: 1/2" BSP (FF).

Min. - Max. flow rate: 1 - 30 l/min. Max. working pressure: 100 bar. Pulses per liter: 328.



366 055, 1/2" **Stainless steel pulse meter** Oval gear meter for use with windshield wash solutions, antifreeze or AdBlue[®] / DEF. Meters are shock proof and isolated from the fluid handled and the assembly is enclosed in a PTE molded shroud. For being connected at each pump outlet.

Inlet - Outlet: 1/2" BSP (FF). Min. - Max. flow rate: 1 - 50 l/min. Max. working pressure: 100 bar. Pulses per liter: 328.



389 001 Solenoid valve

24 VDC solenoid valve for oil and antifreeze (glycol). Inlet - Outlet: 1/2" BSP (F). Max. working pressure: 50 bar (715 psi).

389 004 Solenoid valve

24 VDC Solenoid valve made in Stainless steel for AdBlue[®]/DEF or winshield wash. Inlet-outlet 1/2" BSP (FF). Working pressure: 10 Bar.



SPECIAL AMS VERSION



ADVANCED MONITORING SYSTEM 12 V

This AMS version enables to control and measure the fluid dispensed through up to 6 hose reels per MFDM-LD 12 V (PN 382 113). It is required a 12 VDC solenoid valve and pulse meter per hose reel.

System requires a 12 V AMS access keypad (PN 381 013) and an AMM, Advance Module Memory (PN 381 600). A display included in the MFDM-LD-12 V shows the number of the corresponding hose reels when the unit is inactive, and the quantity dispensed when a transaction is being performed.

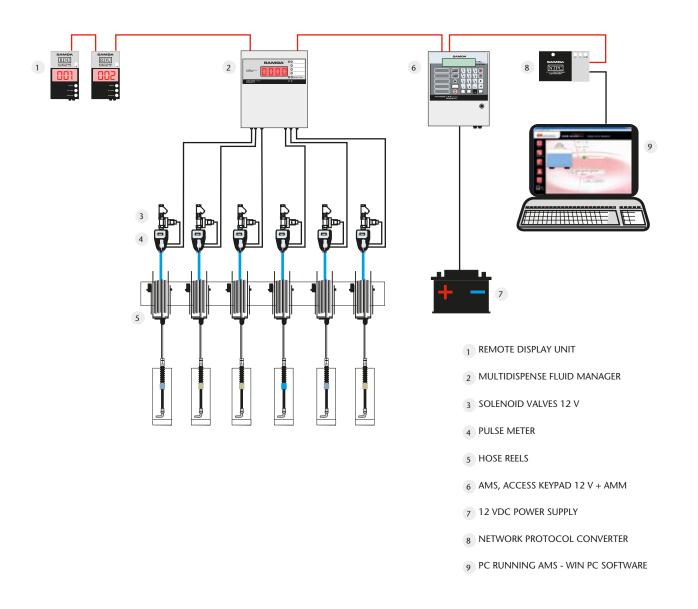
Simultaneous dispenses can be performed, but only the first one will be showed in the display (one or more RDUs can be used too). Two or more MFDM-LD 12 V can be connected to the same network.

The system can be used in vans and trucks providing 12 VDC power supply. This AMS version can be connected to a PC through a standard Samoa NTPC and any of the software version level (PN 381 351 - PN 381 352 - PN 381 353)

381 013 AMS, Access keypad with ticket printer (Voltage input: 12 VDC)

382 113 MFDM, Multi-Fluid Dispense Manager with 4 digits display (Voltage input: 12 VDC)

To be used with 12 V Access keypad (PN 381 013). Provides control to up 6 outlets.







PRESET DOSING MODULE

ELECTRONIC PRESET DOSING MODULE DPS-16

381 030 Electronic preset dosing module

Preset dosing unit for industrial applications that helps you to accurately deliver the correct amount of fluid. It reduces the amount of key/button inputs required to obtain the required volume delivered. It can be used with a wide variety of fluids.

The module consists on a very robust, «vandal proof», button box (nickel coated brass buttons) and a remote display that shows the volume dispensed and the preset program selected. Buttons are used to select the preset program and to program the system. It can store up to 16 different pre-set volumes.

It is an open system and it can work with a wide range of fluids. It accepts any pulse meter from 1 to 6553 pulses per unit and can also work with 24 VDC solenoid valves in different sizes and materials to control the fluid delivery either by closing the fluid line or the pump air supply.

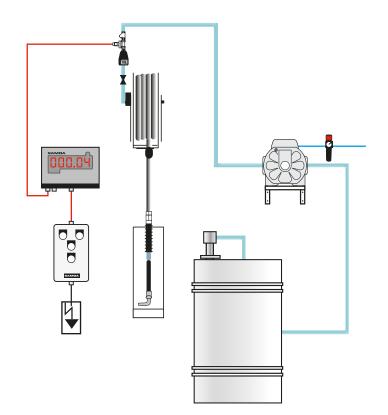
TECHNICAL SPECIFICATION					
Power supply	100 - 230 VAC 50/60 Hz				
Solenoid valve output	24 VDC, max. 1 A				
Pulse per unit	1 - 9999				
Calibration	From buttons				
Pre-set adjust	From buttons				
Number of pre-sets	16				
Number of decimals	0, 1, 2, 3, 4, or AUTO				
Time out	4 minutes				

FLUIDS HANDLED

Mineral and synthetic based lubricants, grease hydraulic and transmission fluids, cutting oils antifreeze and coolant solutions, detergents, Solvents Assembly lines in general industry

APPLICATION

Filling stations



WASTE OIL EQUIPMENT

USED FLUID COLLECTION UNITS	92
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WASTE OIL GRAVITY RECEIVERS	94
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USED FLUID COLLECTION UNITS

obile units designed for the collection of used fluids like motor oil, gear oil, antifreeze and coolant fluids as well as other non aggressive A-III class automotive fluids.

Models for gravity collection are fitted with a telescopic bowl and they can be used under vehicle hoists or inside lubrication pits for collection of the used fluid.

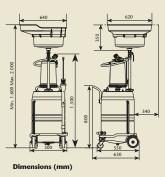
Models fitted with a pneumatic vacuum pump can be used for extracting waste oil though the vehicle motor oil dipstick tube using an adequate adaptor or suction cane. The pneumatic suction pump has no moving, no wear parts, and can achieve up to 80% vacuum. Suction units include a complete set of suction canes and adaptors.

Once full, the reservoir can be discharged either using a remote pump through a hydraulic type connector fitted to the bottom of the unit, with a piston pump attached to the unit or pressurizing the unit reservoir at 0,5 bar (3.5 psi) maximum with a tire inflator.

100 LITERS

COMMON FEATURES



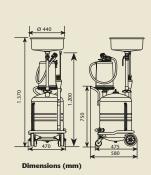


- 100 liters (26 US gallons) capacity steel reservoir, with side level gauge.
- Tray for tools, washers, plugs, etc. on top of the reservoir.
- One piece molded spoiler for securing the discharge hose in pressure discharge models.
- Two reinforced casters and two reinforced fixed wheels.
- Steel tank with epoxy powder coating.
- Models for gravity collection include a telescopic collection bowl, with an oversized 360° positionable composite extension for wider reach, and an anti splash grid that can hold used filters for draining.

70 LITERS

COMMON FEATURES





- 70 liters (17 US gallons) capacity steel reservoir, with side level gauge.
- Two reinforced casters and two reinforced fixed wheels
- Steel tank with epoxy powder coating.



USED FLUID COLLECTION UNITS - SUCTION COLLECTION



Combined oil suction and gravity collection units, with transparent chamber. Units with a 10 liters transparent chamber that can be used as a vacuum reservoir and allows an immediate inspection of the extracted waste oil. They can be used as autonomous units once vacuum is created inside their steel reservoir. Discharge through a discharge hose pressurizing the unit at 0,5 bar using a tire inflator.

372 000, 100 liters combined oil suction and gravity collection unit, with transparent chamber

373 000, 70 liters combined oil suction and gravity collection

unit, with transparent chamber



Combined oil suction and gravity collection units. They can be used as autonomous units once vacuum is created inside their steel reservoir. Discharge through a discharge hose pressurizing the unit at 0,5 bar using a tire inflator.

372 500, 100 liters combined oil suction and gravity collection unit

373 500, 70 liters combined oil suction and gravity collection unit



Oil suction collection units with transparent chamber. Units include a 10 liters transparent chamber that can be used as a vacuum reservoir and allows an immediate inspection of the extracted waste oil. They can be used as autonomous units once vacuum is created inside their steel reservoir. Discharge through a discharge hose pressurizing the unit at 0,5 bar using a tire inflator.

372 100, 100 liters waste oil suction collection unit with transparent chamber

373 100, 70 liters waste oil suction collection unit with transparent chamber



Oil suction collection units. They can be used as autonomous units once vacuum is created inside their steel reservoir. Discharge through a discharge hose pressurizing the unit at 0,5 bar using a tire inflator.

372 600, 100 liters waste oil suction collection unit

373 600, 70 liters waste oil suction collection unit

371 600, 24 liters waste oil suction collection unit

USED FLUID COLLECTION UNITS - GRAVITY COLLECTION



Gravity collection with pressure discharge. Discharge is done through a 1,5 m hose pressurizing the unit reservoir at 0,5 bar (3.5 psi) using a tire inflator. Includes a safety valve to avoid over pressure.

372 400, 100 liters gravity waste oil drainer. Pressure discharge

373 400, 70 liters gravity waste oil drainer. Pressure discharge



Gravity collection with pump discharge. Discharge is done through a 1:1 pressure ratio pneumatic piston pump attached to the back of the unit reservoir and 1,5 m hose with a hydraulic type coupler.

372 200, 100 liters gravity waste oil drainer. Pump discharge

373 200, 70 liters gravity waste oil drainer. Pump discharge

Gravity collection with remote pump discharge. Discharge is done connecting the unit to a wall mounted discharge pump kit though a hydraulic coupler located at the bottom of the reservoir.

372 300, 100 liters gravity waste oil drainer. Remote pump discharge

373 300, 70 liters gravity waste oil drainer. Remote pump discharge

USED FLUID COLLECTION UNITS - SPECIALTY DRAINERS





Low level mobile drainers for gravity collection of waste oil and used automotive fluids such as antifreeze solutions. Recommended to use when a hoist or a service pit is not available. Gravity discharge through a drain valve or using an evacuation pump kit (PN 559 100) through a dry break hydraulic connector (PN 950 352) (not included).

435 000 Low level mobile drainer, 20 liters

20 liters (5.2 US gallons) unit for use with passenger cars and small vans.

436 000 Low level mobile drainer, 95 liters

95 liters (25 US gallons) unit for use with passenger cars, vans, tractors, commercial vehicles, etc.

436 100 Anti-freeze recovery unit

Low level-waste oil drainer 436 000 equipped with a DF50 diaphragm pump. Allows draining the antifreeze when a pit or lift is not available. Thanks to the diaphragm pump and the delivery gun is possible to reuse the antifreeze.



439 100 Pit rolling drainer, 95 Liters

Rolling drainer for being installed between pit rails with minimum / maximum width of 1.040 / 1.450 mm. 95 liters (25 US gallons) capacity. Unit includes antisplash grid, four vertical and four horizontal rollers for easy rolling and an 1-1/4" outlet with ball valve. The unit allows the connection of a hydraulic connector for discharging the unit once full with a discharge pump kit.

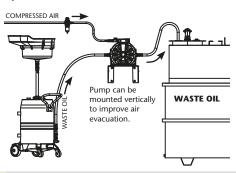




WASTE OIL EVACUATION PUMP KIT

559 100 Waste oil evacuation pump kit

DF100 double diaphragm pump kit for discharging waste oil drainers through a hydraulic coupler. Kit includes: DF100 double diaphragm pump with wall bracket, 1,5 m air connection hose with quick coupler and connector, 1,5 m discharge hose and 1,5 m transparent suction hose with hydraulic connector 950352.



Recommended accessories: 950 303, 3/4" BSP (FF) shut off valve. **950 353,** 3/4" hydraulic coupler.

240 500 Air line filter and pressure regulator 239 001, 3/8" BSPT (M) x 1/4" BSPT (M) adaptor. **945 551,** 3/4" BSP(MM) adaptor.

559 110

379 710



WASTE OIL DRAIN AND EVACUATION KIT FOR CONSTRUCTION AND MINING VEHICLES

559 110 Waste oil drain and evacuation kit for construction and mining vehicles

15 m x 1" high volume hose reel with its inlet hose connected to a DF100 double diaphragm pump. The kit is used for clean, fast and efficient waste oil evacuation from large construction and mining vehicles when connected to the vehicle's engine with a connector compatible with the one at the vehicle drain plug (camlock or hydraulic coupler).

The kit includes a 15 m x 1" hose reel, a DF100 aluminium diaphragm pump, $1.5 \times \frac{3}{4}$ " discharge hose and 1,5 m air connection hose with quick coupler and connector.

Recommended accessories:

950 303, 3/4" BSP (FF) shut off valve.
950 353, 3/4" hydraulic coupler.
240 500, air line filter and pressure regulator.
239 001, 3/8" BSPT (M) x 1/4" BSPT (M) adaptor.
945 551, 3/4" BSP (MM) adaptor.

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 inserted into the engine oil dip stick tube. The unit is installed alongside the service bay and provides the cleanest method for waste oil collection.

Direct from engine to storage tank eliminates operator contact with waste oil and eliminates splashes and spills of waste oil. It also eliminates the use of mobile units and removes all leaking drain plugs issues.

An air operated pump, specially designed for suction applications, extracts the waste oil and pumps it to a remote storage tank. The unit can be used together with a waste oil hose reel (506503 or 506703) for extended reach.

The unit includes a special piston pump for waste oil suction, on/off valve, air filter with pressure regulator, vacuum gauge for monitoring the unit performance, extra large capacity suction filter, 3 m suction hose and complete kit of suction canes and adaptors.

379 711 Wall mounted waste oil suction unit

379 710 Pedestal mounted waste oil suction unit

TYPICAL INSTALLATION

Maximum installation distances: A: Maximum distance 12 m, including hose reel hose

- fully extended.
- **B:** Maximum suction height, 2,5 m.
- C: Maximum height between pump outlet and engine
- oil sump level, 1 m.

See next page for Evacumaster accessories

WASTE



WASTE OIL EQUIPMENT ACCESSORIES

372 003



WASTE OIL SUCTION ACCESSORIES

372 003 Transparent chamber kit

10 I transparent chamber, mounts on 70 and 100 liters waste oil suction units. Completes with vacuum pump, vacuum gauge and 2 m suction hose with rubber grip and connector for Mercedes Benz vehicles.

737 967 Suction hose kit

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



WASTE OIL COLLECTION BOWLS

372 002. Collection bowl for 100 liters waste oil receivers

Includes 20 I metal bowl, oversized extension and antisplash grid, tube, shut-off valve, swivel and adapter for fixing the tube to rteceivers.

373 002 Collection bowl for 100 liters waste oil receivers

Includes 20 I metal bowl, tube, shut-off valve, swivel and adapter for fixing the tube to receivers.

743 305, 20 liters collection bowl

20 I metal bowl with tube and 2" bung adaptor for fixing to an emprty drum.



WASTE OIL SUCTION HOSE REELS

For use with EVACUMASTER units.

506 503 Aluminium single arm waste oil hose reel

Includes 6 m x 5/8" suction hose and 0,8 m x 5/8" connection hose.

507 503 Individually enclosed waste oil hose reel

Includes 6 m x 5/8" suction hose and 0,8 m x 5/8" connection hose.

432 000



DRUM TROLLEYS

432 000, 185 kg / 200 liters drum trolley

431 000, 50 kg drum trolley

HYDRAULIC CONNECTORS AND COUPLERS

950 352, 3/4" BSP (F) hydraulic connectors. **950 353,** 3/4" BSP (F) hydraulic coupler.

945 551, 3/4" BSP (MM) connection adaptor **945 513**, 1-1/4" BSP (M) - 3/4" (M) connection adapter.



SUCTION CANES AND ADAPTERS

All suction hoses used by SAMOA are fitted with a special connector that fits into Mercedes Benz vehicles and to SAMOA suction canes.

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

737 947 Suction adapter for VAG vehicles

737 948 Suction adapter for PSA vehicles

737 950 Suction canes and adaptors set Includes canes 737 952, 737 953, 737 955 and adapters 737 947 and 737 948.

737 972 Suction canes and adaptors set with canes holder

Canes and adaptors set 737 950 with a suction canes holder.



372 002 - 743 305

506 503 - 507 503

ELECTRIC PUMPS

DC DIESEL PUMPS AND KITS - POLUX SERIES	. 98
AC DIESEL PUMPS AND KITS - POLARIS SERIES	. 99
DIESEL PUMP ACCESSORIES	101
AdBlue®/DEF PUMPS AND KITS - SOLURA SERIES	.102
AdBlue®/DEF PUMPS ACCESSORIES	103
OIL PUMPS AND KITS WITH ELECTRIC MOTOR - FLOWSTAR SERIES	104







684 530 - 684 451



DC DIESEL PUMPS AND KITS - POLUX SERIES

12 & 24 V DC ROTARY VANE PUMPS - POLUX SERIES

12 and 24 VDC rotary vane pumps for diesel

Self priming pumps with self-adjustable vanes. Pump body made of cast-iron with rustproof treatment, rotor of sintered steel and vanes of acetyl resin. The pump includes a by-pass valve and a built in filter with easy access for cleaning. The pump can be mounted vertically or horizontally, has a carrying handle and 2 m cable with crocodile clamps.

Inlet / outlet connection: 1" BSP (F) or flange coupling.

Maximum suction lift: 2,5 m.

Electric DC motor with IP-55 protection, allows intermittent operation duty with maximum cycles of 30 minutes.

On/off switch and fuse.

PART No.	SUPPLY	CURRENT	POWER	PRESSURE	FLOW RATE
684 530	12 VDC	22 A	140 W	0,8 bar	40 l/min
684 451	12 VDC	38 A	220 W	0,8 bar	60 l/min
684 531	24 VDC	13 A	160 W	0,8 bar	43 l/min
684 450	24 VDC	25 A	240 W	0,8 bar	65 l/min

684 512 - 684 514



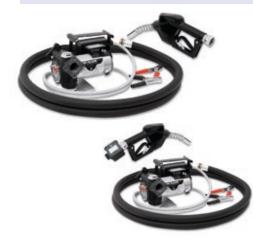
12 V PUMP - POLUX SERIES DIESEL TRANSFER KITS

Portable transfer kit with 12 VDC Polux Series pump, delivery hose, nozzle, meter, fittings and suction kit depending on the model. Order suction accessories separately when not included.

PART No. PUMP OUTLET HOSE NOZZLE

684 512	684 530	4 m (689 024)	Standard (361 000)	-
684 951	684 530	4 m (689 024)	Standard (361 000)	2 m (689 030)
684 514	684 530	4 m (689 024)	Standard + Meter (361 000) + (366 976)	2 m (689 030)
684 461	684 451	4 m (689 021)	Automatic (688 300)	-
684 465	684 451	4 m (689 021)	Automatic + Meter (688 300) + (366 976)	2 m (689 030)

684 460 - 684 464



24 V PUMP - POLUX SERIES DIESEL TRANSFER KITS

Portable transfer kit with 24 VDC Polux Series pump, delivery hose, nozzle, meter, fittings and suction kit depending on the model.

Order suction accessories separately when not included.

PART No.	PUMP	OUTLET HOSE	NOZZLE	SUCTION KIT
684 524	684 531	4 m (689 024)	Standard (361 000)	-
684 526	684 531	4 m (689 024)	Standard (361 000)	2 m (689 030)
684 527	684 531	4 m (689 024)	Standard + Meter (361 000) + (366 976)	2 m (689 030)
684 460	684 450	4 m (689 021)	Automatic (688 300)	-
684 464	684 450	4 m (689 021)	Automatic + Meter (688 300) + (366 976)	2 m - (689 030)

SUCTION KIT



685 720 - 685 722





AC DIESEL PUMPS AND KITS - POLARIS SERIES

230 V - 50 HZ AC ROTARY VANE PUMPS - POLARIS SERIES

230 VAC - 50 Hz rotary vane pumps for diesel

Self priming pumps with self-adjustable vanes. Pump body made of cast-iron with rustproof treatment, rotor of sintered steel and vanes of acetyl resin. The pump includes a by-pass valve and a built in filter with easy access for cleaning. The pump can be mounted vertically or horizontally and has 1,8 m cable with plug.

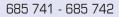
Inlet/outlet connection: 1" BSP (F) or flange coupling

Maximum suction lift: 2,5 m

Electric DC motor with IP-55 protection, allows continuous operation duty. On / off switch and fuse.

SUPPLY CURRENT PRESSURE FLOW RATE PART No. POWER 685 720 230 VAC 2,2 A 370 W 1,7 bar 50 l/min 230 VAC 70 l/min 685 721 3 A 500 W 1,7 bar 95 l/min 685 722* 230 VAC 4,6 A 750 W 1,7 bar

* Does not include built in filter.





230 V PUMP - POLARIS SERIES DIESEL TRANSFER KITS

230 VAC Polaris Series pump kits, include delivery hose and nozzle, fittings and suction kit depending on the model.

Order suction accessories separately when not included.

PART No.	PUMP	OUTLET HOSE	NOZZLE	SUCTION KIT
685 741	685 720	4 m (689 024)	Standard (361 000)	-
685 974	685 720	4 m (689 024)	Standard (361 000)	2 m (689 030)
685 742	685 720	4 m (689 021)	Automatic (688 300)	-
685 743	685 720	4 m (689 021)	Automatic (688 300)	2 m (689 030)
685 771	685 721	4 m (689 024)	Standard (361 000)	-
685 772	685 721	4 m (689 021)	Automatic (688 300)	-

685 750 - 685 752



230 V - POLARIS SERIES DIESEL TRANSFER KITS WITH METER

230 VAC Polaris Series pump, kit with mechanical meter (PN 680 300), delivery hose, fittings, nozzle and suction kit depending on the model. Meter valid for non commercial applications only. Order suction accessories separately when not included.

PART No.	PUMP	OUTLET HOSE	NOZZLE	SUCTION KIT
685 750	685 720	4 m (689 024)	Standard (361 000)	-
685 752	685 720	4 m (689 021)	Automatic (688 300)	-
685 754	685 720	4 m (689 021)	Automatic (688 300)	689 036
685 751	685 721	4 m (689 024)	Standard (361 000)	-
685 753	685 721	4 m (689 021)	Automatic (688 300)	-
685 755	685 721	4 m (689 021)	Automatic (688 300)	689 036



685 716 - 685 718



AC DIESEL PUMP KITS - POLARIS SERIES

WALL MOUNTED TRANSFER 230 V PUMP KITS - POLARIS SERIES

50 or 70 l/min Polaris Series pump on a bracket for wall or tank mounting. The kit includes a 230 V - 50 Hz diesel pump with on/off switch and 1,8 m cable with plug, wall mounting bracket, 4 m delivery hose, nozzle and a three digit meter (PN 680 300) flange mounted to the pump and with a 90° swivelling elbow outlet. Fluid inlet connection 1" BSP (F). Order suction accessory suparately when not included.

Meter valid for non commercial applications only.

PART No.	PUMP	OUTLET HOSE	NOZZLE	METER	SUCTION KIT
685 710	685 720	4 m (689 024)	Standard (361 000)	680 300	-
685 717	685 720	4 m (689 021)	Automatic (688 300)	680 300	-
685 708	685 720	4 m (689 021)	Automatic (688 300)	680 300	689 037
685 713	685 721	4 m (689 024)	Standard (361 000)	680 300	-
685 716	685 721	4 m (689 021)	Automatic (688 300)	680 300	-
685 709	685 721	4 m (689 021)	Automatic (688 300)	680 300	689 037
	v	VAL MOUNTED KI	TS WITH FILTER (689	090)	
685 719	685 720	4 m (689 021)	Automatic (688 300)	680 300 + filter	-
685 718	685 721	4 m (689 021)	Automatic (688 300)	680 300 + filter	-

685 715



685 715



WALL MOUNTED 230 V PUMP CABINETS - POLARIS SERIES

50 or 70 l/min Polaris Series pump in a cabinet for wall or tank mounting. The unit includes a 230 V - 50 Hz diesel pump with 1,8 m cable with plug, 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 1¹ BSP (F). Order suction accessories separately. Meter valid for non commercial applications only.

PART No.	PUMP	OUTLET HOSE	NOZZLE	METER
685 712	680 720	4 m (689 021)	Automatic (688 300)	680 300
685 715	680 721	4 m (689 021)	Automatic (688 300)	680 300

230 V PUMP LOCKABLE CABINETS - POLARIS SERIES

50 or 70 l/min Polaris Series pump in a cabinet with safety lock for wall or tank mounting. The unit includes a 230 V - 50 Hz diesel pump with 1,8 m cable with plug 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). Order suction accessories separately.

Meter valid for non commercial applications only.

PART No.	PUMP	OUTLET HOSE	NOZZLE	METER
685 777	680 720	4 m (689 021)	Automatic (688 300)	680 300
685 778	680 721	4 m (689 021)	Automatic (688 300)	680 300





DIESEL FILTERS

When fitted at the pump outlet they eliminate dirt up 30 microns and the water contained in the diesel. 689 090, 110 l/min diesel filter, 1" BSP (F). 689 098, 65 l/min diesel filter, 1" BSP (F).

689 091 Replacemente cartridge For filter 689 090 689 099 Replacemente cartridge For filter 689 098

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, (PN 689 042).

689 035 For drums or tanks with a maximum height of 1m 689 036 For tanks with a maximum height between 1 and 1,75 m 689 037 Suction assembly. includes 2 m x Ø 25 mm hose, shut off valve and telescopic suctin tube 689 036





DIESEL PUMP ACCESSORIES

DIESEL METERS

Nutating-disk meter for diesel with mechanical register. Very low pressure drop; it can be used for gravity fed applications. Resetable partial reading up to 999,9 liters and permanent 6 digit totaliser. 1" BSP (F) inlet and outlet, both with flange for optional flange mounting. The meter allows to orientate the inlet and outlet in four different positions. Maximum working pressure: 10 bar. Flow range: 20 to 100 l/minute. Precision after calibration: ± 1%. Meter valid for non commercial applications only.

680 300 Diesel meter with mechanical 3 digit register 680 301 Diesel meter with mechanical 4 digit register 689 044 Swivel elbow for meter outlet 1" BSP (MF)

DIESEL NOZZLES

361 000 Aluminium manual nozzle. Fluid inlet: 1" BSP (F) - 100 l/min. 689 910 Thermoplastic manual nozzle. Fluid inlet: 1" BSP (F) - 80 l/min.

688 300 Aluminium automatic nozzle. Fluid inlet: 1" BSP (F) - 60 l/min. 688 001 Aluminium automatic nozzle. Fluid inlet: 1" BSP (F) - 80 l/min. 688 100 Aluminium automatic nozzle. Fluid inlet: 1" BSP (F) - 120 l/min. 364 030 Aluminium inlet swivel. 1" BSP (MF) (included in automatic nozzles).

HOSES FOR DIESEL

Rubber hose with metal swagged 1" BSP (M) fittings.

689 021 PART NUMBER HOSE LENGTH AND DIAMETER 689 021 4 m x Ø 19 mm 689 022 4 m x Ø 25mm 689 023 6 m x Ø 19 mm

PUMP BRACKETS

689 052 Pump wall bracket 756 200 Bracket with handle 360 137 Universal bracket for 205 litres drum and IBCs

756 200



Х

CONNECTION ADAPTORS FOR HOSES

689 042 Foot valve with filter for suction tube, 1" BSP (F) 689 015 Brass foot valve with filter for suction tube, 1" BSP (F)

689 041 Suction filter for hose, Ø 25 mm 689 016 Brass suction filter for hose, 1" BSP (F)

689 040 «Y» strainer, 1" BSP (F) 689 019 Brass «Y» strainer, 1" BSP (F)

689 047 Hose barb adaptor Ø 19 mm with clamps, 1" BSP (M). 689 048 Hose barb adaptor Ø 25 mm with clamps, 1" BSP (M).

689 017 Brass hose barb adaptor Ø 19 mm with clamps, 1" BSP (M) 689 018 Brass hose barb adaptor Ø 25 mm with clamps, 1" BSP (M)

689 053 Pump, drum and suction kit connection adaptor, 2 x 1" BSP (M) / 2" BSP (M)









Transparent PVC spring reinforced hoses. Suction hoses include swaged metal 1" BSP (M) fittings and foot valve.

689 030, 2 m x Ø 25 mm

SUCTION HOSES

689 031, 4 m x Ø 25mm



560 230 - 560 224



AdBlue®/DEF PUMPS AND KITS - SOLURA SERIES

ELECTRIC PUMPS FOR AdBlue®/DEF - SOLURA SERIES

12 and 24 VDC and 230 V 50 Hz AC multi-diaphragm pumps with no mechanical seals designed for dispensing AdBlue[®]/DEF (Urea Solutions). Pumps are self priming and have a by-pass valve. Electric motors have IP55 protection and include on/off switch, fuse and 2 m cable with crocodile clamps (DC pumps) or plug (AC pump). Inlet/outlet connection: 1" BSP (M). Maximum suction lift: 1,8 m. Maximum delivery pressure: 1,6 bar.

Maximum delivery: up to 32 l/min.

PART No.	POWER SUPPLY	ELECTRIC MOTOR POWER	MAXIMUM DELIVERY
560 230	230 V 50 Hz AC	400 W	30 l/min
560 224	24 VDC	310 W	32 l/min
560 212	12 VDC	260 W	32 l/min



All kits include 4 m x 19 mm EPDM delivery hose and the accessories listed in the following table:







PART No.		APPLICATION	PUMP	BRACKET	NOZZLE	METER	SUCTION ACCESSORIES
560 301	230 VAC	IBCs and drums	560 230	360 137	361 001.370 manual		1 m hose and CSC connector
506 302	230 VAC	IBCs and drums	560 230	360 137	361 001.370 manual	366 760	1 m hose and CSC connector
506 303	230 VAC	IBCs and drums	560 230	360 137	569 000 automatic		1 m hose and CSC connector
560 304	230 VAC	IBCs and drums	560 230	360 137	569 000 automatic	366 760	1 m hose and CSC connector
560 300	230 VAC	IBCs and drums	560 230		361 001.370 manual		2,5 m hose and foot valve
560 310	12 VDC	IBCs and drums	560 212		361 001.370 manual		2,5 m hose and foot valve
560 320	24 VDC	IBCs and drums	560 224		361 001.370 manual		2,5 m hose and foot valve





AdBlue[®]/DEF ACCESSORIES

AdBlue®/DEF ELECTRONIC LINE METERS

366 010 AdBlue®/DEF oval gear meter

Oval gear meter manufactured in PVC, stainless steel and acetal for AdBlue®/DEF. Digital display, works with two AAA alkaline batteries. Inlet/outlet thread 1/2" BSP (F). Flow rate: 1-50 l/min.

366 760 AdBlue[®]/DEF meter, 1" BSP (MM)

Digital line meters provided with metering chamber with turbine system, electronic display, reset button, parcial metering function (99.999 I), resettable totalizer (999.999), calibration function. Flow rate: 8-110 l/min. Max. pressure: 10 bar. Precision: +/- 1%. Power supply: 2 x 1,5 V batteries. 366 976 AdBlue®/DEF meter with a stainless steel female adaptor, 1" BSP (FM) 366 761 AdBlue®/DEF meter with a 2 stainless steel female adaptors, 1" BSP (FF)

AdBlue®/DEF nozzles with stainless steel and thermoplastic versions available. Depending on the

569 001 Automatic (stainless steel/polypropylene), 45 l/min, Ø 19 mm inlet thread

model they can be manual or automatic, with spike or thread connection. 361 003.370 Manual (thermoplastic), 90 l/min, 1" BSP (F) inlet thread 361 002.370 Manual (thermoplastic), 90 l/min, Ø 25 mm inlet thread 361 001.370 Manual (thermoplastic), 90 l/min, Ø 19 mm inlet thread

569 000 Automatic (stainless steel), 45 l/min, Ø 19 mm inlet thread

689 055 Polypropylene thread adaptor, 1" BSP (FF) 945 708 Stainless steel thread adaptor, 1" BSP (FF)

569 000



930 507

AdBlue[®]/DEF HOSES

AdBlue[®]/DFF NO77LFS

EPDM HOSES

Service EPDM hoses for AdBlue®/DEF transferring or suction, sold in bulk (minimum 1 m). 930 507, Ø 19 mm / 1 m EPDM hose 930 505, Ø 13 mm / 1 m EPDM hose

PVC HOSES

Transparent suction hoses made of reinforced PVC for AdBlue[®]/DEF transferring. 689 030, 2 m x PVC suction hose Ø 25 mm With swaged terminals and foot valve 689 042, 1" BSP (M). 689 031, 4 m x PVC suction hose Ø 25 mm With swaged terminals and foot valve 689 042, 1" BSP (M). 932 025, 1 m hose PVC Ø 25 mm in bulk (Minimum 1 m).



AdBlue[®]/DEF ACCESSORIES

689 042 Polypropylene foot valve with filter. 1" BSP (F) 560 903 Polypropylene foot valve. 1" BSP (F)

689 041 Polypropylene filter for suction hose, Ø 25 mm hose barb connection

689 047 Polypropylene hose tail connection kits, Ø 19 mm. 1" BSP (M), with connection clamps 689 048 Polypropylene hose tail connection kits, Ø 25 mm. 1" BSP (M), with connection clamps

560 901 CSC quick coupling, Ø 19 mm hose barb connection 560 902 Suction tube for CSC connection. With 2" BSP (M) connection 560 906 Suction tube for CSC connection. With 2" TRISURE connection 560 904 1" BSP (F) check valve

360 137 Universal pump bracket

Allows fixing a pump onto a 205 l drum or to a 1000 IBC. With carrying handle and drip pocket.





OIL PUMPS WITH ELECTRIC MOTOR - FLOWSTAR SERIES

OIL PUMPS WITH 12 AND 24 VDC ELECTRIC MOTOR - FLOWSTAR SERIES

External gear pumps with 12 and 24 V DC motors wit IP55 protection, on/off switch, fuse and 2 m cable with crocodile clamps. Pump can work in interment duty cycles of 30 minutes and has built in by-pass valve. Inlet connection: 3/4" BSP (F). Outlet connection: 1/2" BSP (F). Maximum suction lift: 2,5 m.

 PART NO.
 POWER SUPPLY
 ELECTRIC MOTOR POWER
 MAXIMUM PRESSURE
 MAXIMUM DELIVERY

 561 012
 12 VDC
 200 W
 11,5 bar
 5,2 l/min

 561 024
 24 VDC
 200 W
 12,5 bar
 5,6 l/min

561 300 - 561 210

OIL PUMPS WITH 230 VAC AND 380 VAC MOTORS - FLOWSTAR SERIES

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 to a wall.

Models with electronic pressure switch start automatically whenever a pressure drop in the distribution line occurs (i.e. when a delivery gun is opened) and stops once pressure is built again in the line (i.e. when a delivery gun is closed).



PART No.	POWER SUPPLY	ELECTRIC MOTOR POWER	MAXIMUM PRESSURE	MAXIMUM DELIVERY	ELECTRONIC PRESSURE SWITCH
561 100	230 V - 50 Hz	600 W	10 bar	10 l/min	NO
561 101	400 V - 50 Hz	600 W	10 bar	10 l/min	NO
561 110	230 V - 50 Hz	600 W	10 bar	10 l/min	YES
561 200	230 V - 50 Hz	780 W	15 bar	13 l/min	NO
561 201	400 V - 50 Hz	780 W	15 bar	13 l/min	NO
561 210	230 V - 50 Hz	780 W	15 bar	13 l/min	YES
561 300	230 V - 50 Hz	780 W	24 bar	11 l/min	NO
561 301	400 V - 50 Hz	780 W	24 bar	11 l/min	NO
561 310	230 V - 50 Hz	780 W	24 bar	11 l/min	YES

561 610

HIGH PERFORMANCE OIL PUMPS WITH ELECTRIC MOTOR - FLOWSTAR SERIES



High performance external gear pumps directly coupled to an electric motor with IP 55 protection for the transfer or distribution of large volumes of lubricants. Pump gears are manufactured in steel and pump body is manufactured in cast iron. All pumps include adjustable by-pass valve.

PART No.	POWER SUPPLY	ELECTRIC MOTOR POWER	MAXIMUM PRESSURE	MAXIMUM DELIVERY
561 615	230 V - 50 Hz	750 W	8 bar	25 l/min
561 614	230 V - 50 Hz	1.500 W	8 bar	50 l/min
561 611	230 V - 50 Hz	2.000 W	8 bar	70 l/min
561 613	400 V - 50 Hz	1.500 W	10 bar	50 l/min
561 610	400 V - 50 Hz	1.500 W	9,5 bar	70 l/min



561 014 - 561 013

OIL PUMP PORTABLE KITS

4							2
PART No.	POWER SUPPLY	PUMP	OUTLET HOSE	DELIVERY GUN	SUCTION ACCESSORIES	OTHER ACCESSORIES	
562 000	230 VAC	561 100	3 m (362 103)	Metered control gun 365 535	3 m with foot valve 367 012	Bracket 756 012	
562 010	230 VAC	561300	3 m (362 103)	Metered control gun 365 535	3 m with foot valve 367 012	Bracket 756 012	
561 014	12 VDC	561 012	3 m (362 103)	Control gun 363 115	3 m with foot valve 367 012		
561 013	12 VDC	561 012	3 m (362 103)	Metered control gun 365 535	3 m with foot valve 367 012		
561 026	24 VDC	561 024	3 m (362 103)	Control gun 363 115	3 m with foot valve 367 012		
561 025	24 VDC	561 024	3 m (362 103)	Metered control gun 365 535	3 m with foot valve 367 012		

562 100

MOBILE OIL DISPENSER FOR 205 L DRUMS WITH ELECTRIC 230 V PUMP - FLOWSTAR SERIES

Mobile oil dispenser with Flowstar Series electric pump. Includes connection accessories, hose end meter and trolley for 205 litre drums.



PART No.	PUMP	OUTLET HOSE	SERVICE GUN	SUCTION KIT	OTHER ACCESSORIES
562 100	561 100	3 m (362 103)	Metered control valve (365 535)	3 m (367 012)	Trolley (432 000) + (360 134)

LUBRICATION AND FLUID HANDLING

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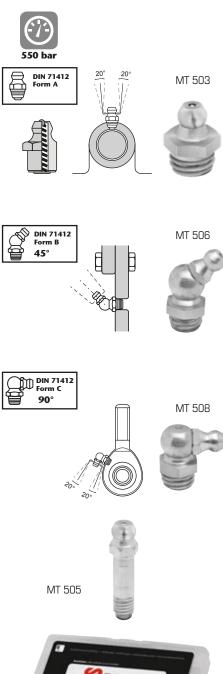






GREASE NIPPLES

050 001







HYDRAULIC GREASE NIPPLES					
MT 503 STRAIGHT	MT 506 45° ANGLED	MT 508 90° ANGLED	THREAD	РІТСН	
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	Ø 6 mm	
011 940	N.A.	N.A.	No thread	Ø 8 mm	
011 950	N.A.	N.A.	No thread	Ø 10 mm	

LONG HYDRAULIC NIPPLES

	MT 505
012 020	Long hydraulic nipple, M 6 x 1,00
012 220	Long hydraulic nipple, 1/4" SAE

HYDRAULIC GREASE NIPPLES ASSORTMENT

Assortment of 140 hydraulic grease nipples. Includes straight, 45° and 90° hydraulic nipples with the most popular threads.

ТҮРЕ	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



-	



031 950

032 260





15 MM HEXAGON HEAD NIPPLES (MT 150)

PART No.	THREAD	РІТСН	PART No.	THREAD	РІТСН
021 060	Metric	M 6 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	021 640	BSP	3/8"
021 240	Metric	M 10 x 1,25	021 500	SAE (UNF)	1/4" (x 28)
021 260	Metric	M 10 x 1,50	021 520	SAE (UNF)	5/16" (x 18)
021 280	Metric	M 12 x 1,00	021 540	SAE (UNF)	3/8" (x 16)
021 300	Metric	M 12 x 1,25	021 700	Whitworth	1/4"
021 320	Metric	M 12 x 1,50	021 720	Whitworth	5/16"
021 340	Metric	M 12 x 1,75	021 740	Whitworth	3/8"

400 bar

400 ba MT 150

MT 153



MT 157

MT 156





DOUBLE HEXAGON AND ROUND HEAD NIPPLES					
PART No.	DIAMETER	THREAD	РІТСН	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	

3/8"

MT 930 - round head

070 000 00000

THREAD GAUGES

22 mm

025 640

070 000 Metric thread gauge. 070 001 Whitworth & BSP thread gauge. 070 002 SAE & BSF thread gauge.

BSP





121 011



121 050 121 020 121 000



122 011 122 001







710 298



-

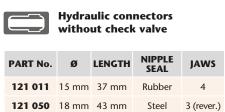
136 021

140 020

GREASE CONNECTORS

GREASE CONNECTORS, NOZZLES AND ACCESSORIES

For use with hydraulic grease fittings. All connector heads, contact surfaces and jaws are manufactured in hardened steel. Connection thread 1/8" NPT (F).



Hydraulic connectors with check valve

Check valve prevents grease drops when the grease pump is not in use.

PART No.	ø	LENGTH	NIPPLE SEAL	JAWS
121 020	15 mm	37 mm	Rubber	4
121 000	15 mm	37 mm	Rubber	3

GREASE CONNECTORS AND ACCESSORIES

For use with hand operated units on button head nipples. Maximum working pressure 150 bar. Connection thread 1/8" NPT (F).

 PART No.
 Ø NIPPLE
 NIPPLE SEAL

 122 001
 15/16 mm
 Rubber

 122 011
 22 mm
 Rubber

For use with hand operated grease guns only. Connection thread: 1/8" NPT (F). Recommended working pressure 150 bar.

PART No.	DESCRIPTION	LENGTH	APPLICATION
123 001	Giant cupped nozzle	43 mm	For concave type nipples DIN 3405
123 011	Grease cupped nozzles	14 mm	For concave type nipples DIN 3405
126 500	Needle nose adaptor	37 mm	For hard to reach greasing points
124 011	Grease zerk nozzle	16,60 mm	For Zerk grease nipples DIN 3402
126 200	Seal off adaptor	49 mm	For lubrication holes, spindles, U joints
126 000	Grease needle nozzle	96 mm	With retractable safety sleeve

OTHER ACCESSORIES

PART No.	APPLICATION
126 400	Swivelling nozzle adaptor for use with flexible hoses 1/8" NPT (MF)
128 501	Quick connect adaptor for Ø 18 mm hydraulic connectors

GREASE STEMS - 1/8" NPT (MM)

710 659 Positionable 45° angled rigid stem with four-jaw connector with check valve (PN 121 011). **710 214** Angled stem with four-jaw connector (PN 121 011).

710 710 Straight stem with four-jaw connector (PN 121 011).

710 297 Straight stem with cupped nozzle (PN 123 011).

710 298 Straight stem with zerk nozzle (PN 124 011).

GREASE OUTLET HOSES

Single polyester braid reinforced rubber hoses. Max. working pressure: 400 bar. Min. burst pressure: 1.000 bar. 1/8" NPT (MM). For hand operated grease pumps.

PART No. HOSE ONLY	PART No. HOSE WITH GREASE CONNECTOR 121 011	HOSE LENGTH
136 021	137 021	300 mm
136 041	137 041	400 mm
136 051	137 051	500 mm
136 201	137 201	2.000 mm

Double steel braid reinforced rubber hoses. Max working pressure: 415 bar. Min. burst pressure: 1.650 bar. 1/8" NPT (MM). For hand operated and air powered grease pumps.

PART No. HOSE ONLY	PART No. HOSE WITH GREASE CONNECTOR 121 020	HOSE LENGTH
140 020	141 020	300 mm
140 040	141 040	400 mm
140 050	141 050	500 mm
140 100	N/A	1.000 mm
140 200	141 200	2.000 mm
140 400	141 400	4.000 mm

Product specifications are subject to change without prior notice





- Very tough, real heavy duty, cast iron head for maximum durability, uniform pressure and flow delivered throughout the pump's entire fife.
- Precision machined piston ensures leak free high pressure operation without requiring the use of seals.
- Heavy duty knurled barrel with large pitch threads for easy barrel removing for loading.
- Locking follower rod, heavy duty beveled follower and spring.
- Supplied ready to fill using various methods (cartridge, loader pump and suction).



500 CC. LEVER ACTION GREASE PUMPS

Universal grease pumps to be used with 400 g (14 oz) grease cartridges or with bulk grease. Bulk grease loading by suction or using a filler pump. Maximum working pressure: 500 bar (7,250 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 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).

101 300, 600 cc. lever action grease pump

101 800, 1.000 cc. lever action grease pump

Locking with ratchet



Suction filling



Cartridge loading



Loading with filler pump



Rugged cast-iron pump head for durability



MANUAL HAND HELD GREASE PUMPS

106 200



500 CC. PISTOL GRIP GREASE PUMPS

Pistol grip grease pump for hard to reach lubrication points. Three way loading: 400 g (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 braid reinforced outlet hose with a four-jaw hydraulic type connector (PN 137 031).

102 102 - 102 103

PUSH ACTION GREASE PUMPS

Push action grease pumps. They deliver grease or oil at 150 bar maximum pressure when pushed on a grease nipple. Full metal construction for bulk grease.

102 100, 60 cc. metal barrel, zerk nozzle (grease/oil). 102 101, 60 cc. metal barrel, concave nozzle (grease/oil). 102 102, 150 cc. metal barrel, zerk nozzle (grease/oil). 102 103, 150 cc. metal barrel, concave nozzle (grease/oil).

LEVER ACTION GREASE PUMPS FOR BULK GREASE

All grease pumps are individually boxed and include filler nipple for loading with a filler pump and a rigid stem with a four jaw hydraulic connector. 109 900, 300 cc. lever action grease pump





pump head for

durability



Locking with pin





Loadina with filler pump

100 900

109 900





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 and ground 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 braided rubber hose with a four-jaw hydraulic connector (PN 137 031).











Loading with filler pump

Cartridge loading



AIR OPERATED AND BATTERY HAND HELD GREASE PUMPS, FILLER PUMPS AND FITTINGS

167 500 - 168 600

160 100



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 140 040) 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 g (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 140 040) 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).



128 003 - 128 005

AND LOADER FITTINGS 128 003 Grease gun filler valve, Ø 9 mm.

FILLER VALVES

128 033 Grease gun filler valve, Ø 12,5 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)





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 (\emptyset 9 mm and \emptyset 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 Filler pump for centralized greasing systems, 12 - 18 kg kegs** Includes a 310 mm drum cover. **108 502 Filler pump for centralized greasing systems, 20 kg kegs** Includes a 330 mm drum cover.

108 503 Filler pump for centralized greasing systems, 50 kg drums Includes a 405 mm drum cover.



Loading with filler pump (using filler valve: 128 003)

BATTERY GREASE PUMPS

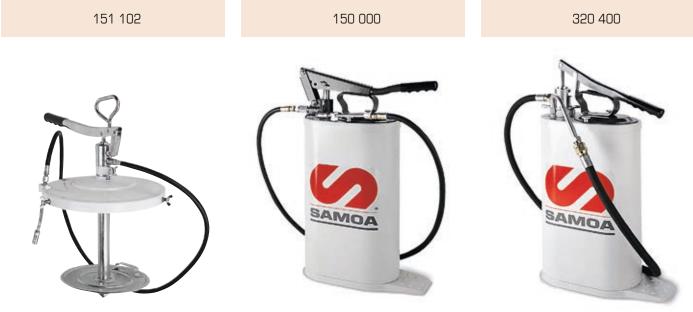
160 100, 18 V NiMH battery grease pump For use with standard grease cartridges or bulk grease. High pressure delivery, up to 500 bar (7,200 psi) and 80 g/min.

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.

160 101, 18 V Li-ION battery grease pump Same as model 160 100 but with Li-ION batteries.



GREASE COMPRESSORS AND BUCKET PUMPS



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 liter 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 g or 10 g 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 liters

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.

157 000



PEDAL ACTION GREASE PUMP 5 kg

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 g.

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

306 100 - 314 540 308 010 605 000 304 500 Image: A state of the state of the

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 liter pails.
450 mm long suction tube.
306 200 for 20 and 60 liter drums.
620 mm long suction tube.
306 100 for 60 liter drums.
760 mm long suction tube.
306 400 for 205 liter drums.

1.100 mm long suction tube.

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.

ROTARY PUMPS

308 010 Aluminium rotary action drum pump

For transfer of light to medium viscosity petroleum based fluids. Aluminium pump body with zamak rotor and shaft. Delivery 0,3 liter per revolution. Pump includes height adjustable bung adaptor, three pieces suction tube and 1 m delivery hose.

308 300 Cast-iron rotary action drum pump

For transfer of light to medium viscosity petroleum based fluids. Cast-iron pump body with steel shaft. Delivery 0,3 liter per revolution. Pump includes height adjustable bung adaptor, three pieces suction tube with foot valve and 1 m delivery hose.

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 liter, 0,15 liter, 0,20 liter or 0,25 liter per stroke. Pump includes telescopic suction tube that can be used with 60 and 205 liter 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 liter 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 0,45 liter per stroke.

304 509 Lever action drum pump with Viton[®] seals

Can be used with fluids like antifreeze and other non corrosive fluids. To avoid pump corrosion, it is recommended to flush the pump with diesel after its use with other fluids than lubricants.



GEAR OIL DISPENSERS

320 300 Gear oil dispenser

With 330 mm cover for 20 liter pails and 1,5 m transparent hose with nozzle. **320 310 Gear oil dispenser**

With 310 mm cover for 12 to 18 liter pails and 1,5 m transparent hose with nozzle.

741 602 Carrying handle

Fits on 310 and 330 mm drum covers.



DRUM PUMPS FOR VARIOUS FLUIDS



LIFT ACTION PUMPS FOR CHEMICAL FLUIDS

300 401 Lift action pump for chemical products 205 liter 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 nut. Recommended for use with acid based fluids, detergents and kerosene based solvents.

300 400 Lift action pump for chemical products, 20-25-50 liter drums

Same as model 300 401, but with 500 mm suction tube for 20, 25, 50 liter drums.

300 500 Lift action pump for chemicals 20, 25, 50 liter drums

Lift action pump with nylon covered piston and PTFE seals. 500 mm suction tube, \emptyset 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, 205 liter drums

Same as model 300 500, but with 1.000 mm suction tube for 205 liter drums.

NOTE: Please check fluid compatibility with the pump prior to its use.

SYPHON TRANSFER PUMP

302 001 Syphon transfer pump

Lever action syphon pump. Design allows transfer by syphoning once the pump has been primed, giving a continuous flow of 8 l/min. Bung thread fits 50 and 205 liter 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.

PLASTIC LEVER PUMPS

Lever action pumps with a unique toggle mechanism that provides very a smooth operation.

Pumps are manufactured in polypropylene and include a 2" bung adaptor with a lockable nut that allows placing the pump in its optimal position for an easier lever action. Pump delivery per stroke: 500 cc.

Includes delivey hose.

300 006 Lever action pump, polypropylene/EPDM

Blue color pump with EPDM seals. Can be used with AdBlue[®]/DEF.

300 007 Lever action pump,

polypropylene/Viton® Red color pump, with Viton® seals. Compatible with a wide range of chemicals.

300 009 Lever action

pump, polypropylene/NBR White color pump, with NBR seals. Compatible with lubricants.

PVC ROTARY ACTION DRUM PUMP

308 200 PVC rotary action drum pump (Polypropylene/EPDM)

For the continuous transfer of acid-based corrosive fluids and water based fluids from 20, 50 or 205 liter drums. PVC pump with stainless steel shaft.

Delivery 0,25 l per revolution. Pump includes height adjustable bung adaptor, three pieces suction tube and delivery hose.



FUNNELS, MEASURES, GRAVITY COCKS, JERRY CANS AND OIL SUCTION PUMPS





AIR TREATMENT UNITS (FRLs)

GENERAL INFORMATION

Air line filters

To protect valves, pump motors or pneumatic tools from damage or wear caused by dirt and moisture contained in compressed air. Semiautomatic bleeding valve.

240 000

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.

241 001



AIR TREATMENT COMPONENTS Ø 1/4"

Maximum working pressure 12 bar. 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"

246 010





AIR TREATMENT COMPONENTS Ø 1/2"

Maximum working pressure 12 bar. 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 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.



AIR TREATMENT COMPONENTS Ø 3/4"

Maximum working pressure 16 bar. Connection threads: 3/4" BSP (FF). 242 102 Combined air filter - regulator and lubricator, Ø 3/4"

242 202 Air line regulator, Ø 3/4" 0 to 12 bar.

242 302 Air filter, Ø 3/4" Semiautomatic bleeding.

242 402 Air lubricator, Ø 3/4"

AIR HOSES

Low pressure hoses for compressed air 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	246 060 6,0 m 1/		1/4" BSPT (MM)	15 bar
246 100	246 100 10,0 m 1/4" - 6 r		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" - 1 0 mm	3/8" BSPT (M) - 1/2" BSPT (M)	15 bar



Manufactured in

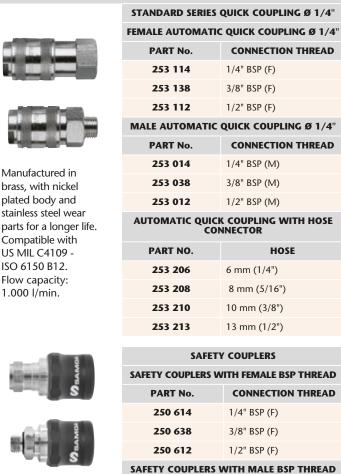
brass, with nickel plated body and

Compatible with US MIL C4109 -

ISO 6150 B12. Flow capacity:

1.000 l/min.

AIR COUPLERS AND CONNECTION ADAPTORS FOR COMPRESSED AIR



Safety quick couplers
for compressed air.
One-step release and
exhaust operation
quickly vents system
pressure allowing for
a safe disconnect.
Manufactured in
Stainless steel, nickel
plated brass, NBR
and technoplymer.
Couplers conform
with ISO 6150 B12.
Flow capacity:
1.200 l/min.
Pressure range: 1 to
15 bar.



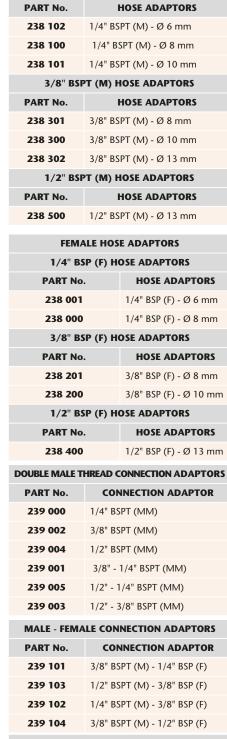
For use with standard and industrial series Ø 1/4" quick couplings. Compatible with US MIL C4109 -ISO 6150 B12.

253 112	1/2" BSP (F)					
LE AUTOMATIC	QUICK COUPLING Ø 1/4"					
PART No.	CONNECTION THREAD					
253 014	1/4" BSP (M)					
253 038	3/8" BSP (M)					
253 012	1/2" BSP (M)					
ITOMATIC QUICK COUPLING WITH HOSE CONNECTOR						
PART NO.	HOSE					
253 206	6 mm (1/4")					
253 208	8 mm (5/16")					
253 210	10 mm (3/8")					
253 213	13 mm (1/2")					
SAFETY COUPLERS						
	/ITH FEMALE BSP THREAD					
PART No.	CONNECTION THREAD					
250 614	1/4" BSP (F)					
250 638	3/8" BSP (F)					
250 638 250 612	3/8" BSP (F) 1/2" BSP (F)					
250 638 250 612	3/8" BSP (F) 1/2" BSP (F) WITH MALE BSP THREAD					
250 638 250 612	3/8" BSP (F) 1/2" BSP (F)					
250 638 250 612 FETY COUPLERS PART No. 250 514	3/8" BSP (F) 1/2" BSP (F) WITH MALE BSP THREAD CONNECTION THREAD 1/4" BSP (M)					
250 638 250 612 FETY COUPLERS V PART No.	3/8" BSP (F) 1/2" BSP (F) WITH MALE BSP THREAD CONNECTION THREAD 1/4" BSP (M) 3/8" BSP (M)					
250 638 250 612 FETY COUPLERS PART No. 250 514	3/8" BSP (F) 1/2" BSP (F) WITH MALE BSP THREAD CONNECTION THREAD 1/4" BSP (M)					
250 638 250 612 FETY COUPLERS PART No. 250 514 250 538 250 512	3/8" BSP (F) 1/2" BSP (F) WITH MALE BSP THREAD CONNECTION THREAD 1/4" BSP (M) 3/8" BSP (M)					
250 638 250 612 FETY COUPLERS PART No. 250 514 250 538 250 512	3/8" BSP (F) 1/2" BSP (F) WITH MALE BSP THREAD CONNECTION THREAD 1/4" BSP (M) 3/8" BSP (M) 1/2" BSP (M)					
250 638 250 612 FETY COUPLERS 7 PART No. 250 514 250 538 250 512 SAFETY COUPLE	3/8" BSP (F) 1/2" BSP (F) WITH MALE BSP THREAD CONNECTION THREAD 1/4" BSP (M) 3/8" BSP (M) 1/2" BSP (M) 1/2" BSP (M)					

AIR NIPPLES Ø 1/4"							
FEMALE AIR NIPPLES Ø 1/4"							
PART No.	CONNECTION THREAD						
259 114	1/4" BSP (F)						
259 138	3/8" BSP (F)						
259 112	1/2" BSP (F)						
MALE AIR NIPPLES Ø 1/4"							
PART No.	CONNECTION THREAD						
259 014	1/4" BSP (M)						
259 038	3/8" BSP (M)						
259 012	1/2" BSP (M)						
AIR NIPPLES WIT	H HOSE CONNECTOR						
PART No.	HOSE						
259 206	6 mm (1/4")						
259 208	8 mm (5/16")						
259 210	10 mm (3/8")						
259 213	13 mm (1/2")						



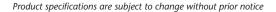




MALE HOSE ADAPTORS

1/4" BSPT (M) HOSE ADAPTORS

90° ELBOW ADAPTORS							
PART No.	CONNECTION ADAPTOR						
239 300	1/4" BSP (FF)						
239 302	3/8" BSP (FF)						
239 303	1/2" BSP (FF)						
239 350	3/8" BSP (MF)						
TWO W	AY AIR FLOW DIVIDERS						
PART No.	CONNECTION ADAPTOR						
239 200	1/4" BSP (MF)						
239 201	3/8" (MF)						





SAMOA

PART No.	PAGE PART No.	PAGE	PART No. I	PAGE	PART No.	PAGE
011 060	108 015 220	. 108	032 060	. 109	122 011	. 110
011 100	108 015 240	. 108	032 160	. 109	123 001	. 110
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011 160	108 015 280	. 108	032 260	. 109	124 011	. 110
011 180	108 015 300	. 108	032 600	. 109	126 000	. 110
011 220	108 015 320	. 108	032 620	. 109	126 200	. 110
011 240	108 015 340	. 108	032 740	. 109	126 400	. 110
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011 280	108 015 520	. 108	032 949	. 109	128 003	. 113
011 300	108 015 540	. 108	032 959	. 109	128 004	. 113
011 320	108 015 600	. 108	050 001	. 108	128 005	. 113
011 340	108 015 620	. 108	051 060	. 108	128 033	. 113
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011 520	108 015 720	. 108	051 220	. 108	136 021	. 110
011 540	108 015 740	. 108	051 260	. 108	136 041	. 110
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011 620	108 015 910	. 108	052 060	. 108	136 201	. 110
011 700	108 021 060	. 109	052160	. 108	137 021	. 110
011 720	108 021 140	. 109	052 220	. 108	137 041	. 110
011 740	108 021 160	. 109	052 260	. 108	137 051	. 110
011 900	108 021 220	. 109	052 600	. 108	137 201	. 110
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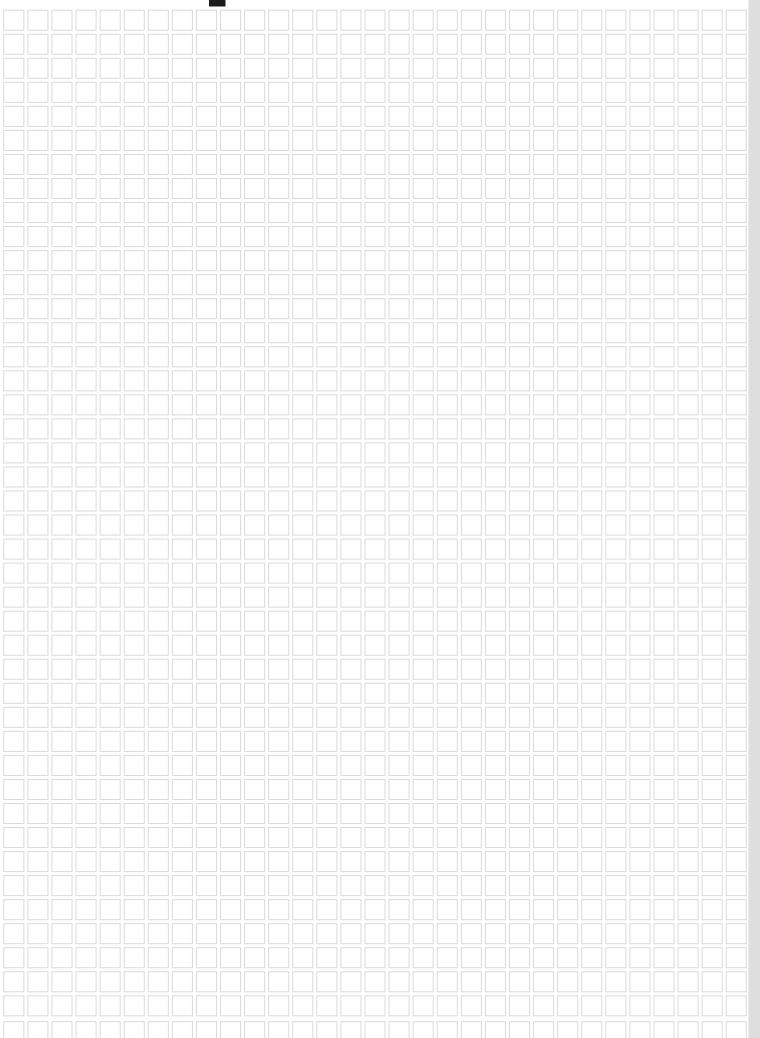
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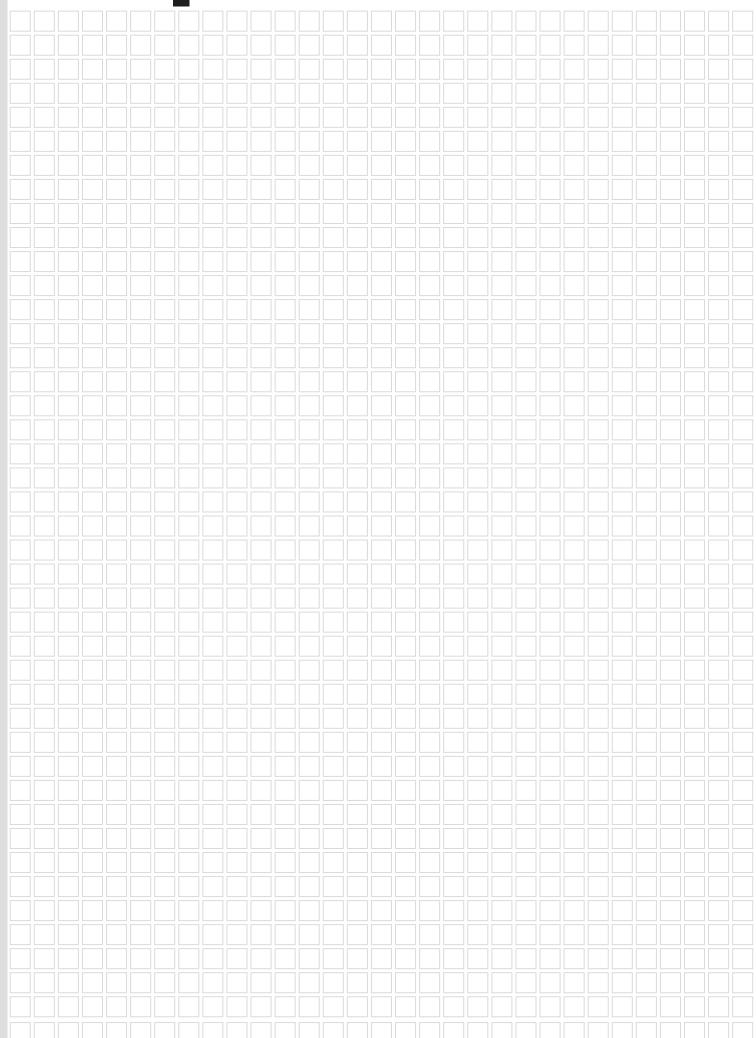
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