SAMOA QUALITY AND LEADERSHIP

FLUID HANDLING TECHNOLOGY

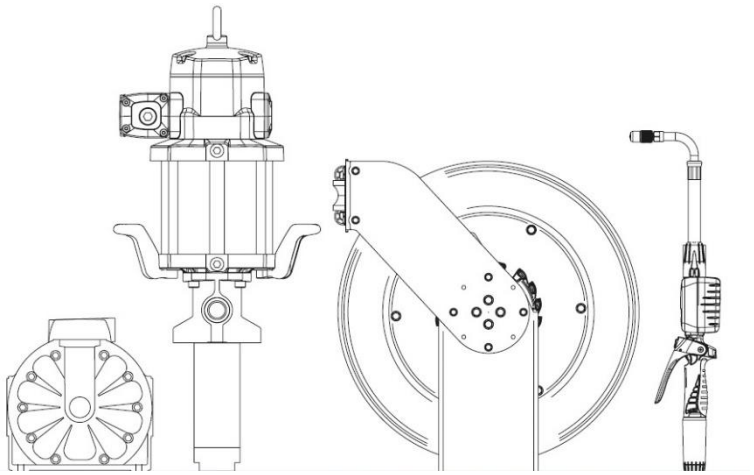
SAMOA, a privately owned company, is a leading European manufacturer of Lubrication and Fluid Handling Equipment. SAMOA products are used for transfer, dispensing, dosing and recovery. SAMOA designs and manufactures a wide program that includes air operated piston and diaphragm pumps, volume flow meters,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

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.

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.



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.

SAMOA

PUMP MASTER®

	PUMP MASTER 2 - 1:1	PUMP MASTER 2 - 3:1	PUMP MASTER 4 - 3:1	PUMP MASTER 4 - 5:1
PUMP DESCRIPTION	Utility Transfer Pump	Utility Medium Pressure Pump	Standard Duty Medium Pressure Pump	Standard Duty Medium Pressure Pump
SIMULTANEOUS OPERATION OUTLETS	1 (no reels)	1	1 to 2	1 to 2
MAX. LINE LENGTH	30 m - 100'	60 m - 200'	60 m - 200'	150 m - 490'
APPLICATION	Service shops In-plant oil transfer Agriculture Marine	Auto dealers Service shops Fast lube centres Agriculture Marine	Auto dealers and service shops Fleet service Fast lube centres Lube trucks Mining and construction In-plant	Auto and truck dealers Fleet service Mining and construction Lube trucks Railroad and mass transit vehicles Marine In-plant





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





PUMPMASTER 45 - 25:1	PUMPMASTER 45 - 40:1	PUMPMASTER 45 - 70:1	PUMPMASTER 60 - 12:1	PUMPMASTER 60 - 80:1
Intensive Duty pressure transfer pump	Intensive Duty high flow pump	Intensive Duty high pressure pump	Intensive Duty volume transfer pump	Intensive Duty high performance pump
1 No reels - mobile units	4 or more	4 or more	1 High volume transfer pump	4 or more
75 m - 245'	125 m - 410'	175 m - 575'	50 m - 165´	250 m - 820'
Moderate pressure transfer Lube trucks Mining and	Heavy Duty service shops Fleets Lube trucks Mining and construction Railroad and mass transit vehicles In-plant Marine	Heavy Duty service shops Fleets Lube trucks Mining and construction Railroad and mass transit vehicles In-plant Marine	Low pressure, high volume transfer Mining and construction In-plant Railroad and mass transit vehicles	Fleets Lube trucks Mining and construction Railroad and mass transit vehicles In-plant Marine