

SAMSON

# **PUMPMASTER 45 - 40:1 RATIO GREASE PUMPS**

## PM45 HEAVY-DUTY SERIES

### HEAVY-DUTY HIGH FLOW PUMPS

High flow double acting pumps with high pressure delivery for use in lubrication systems that require a combination of high flow and pressure delivery. Pumps can be used with grease up to NLGI-2 viscosity. These pumps can be used in medium length systems that include simultaneous operation outlets.

Pumps are available for cover mount to 120 lb (50 kg) and 400 lb (185 kg) open drums and for horizontal and side mount on grease totes, bags and tanks.

### **FLUIDS HANDLED**

• Grease up to NLGI-2.

### **MARKETS SERVED**

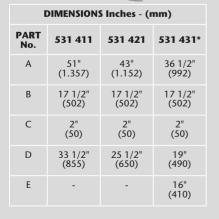
- Heavy-Duty service shops.
- Fleets.
- Mining and construction.
- Railroad and mass transit.
- In-plant.
- Marine.

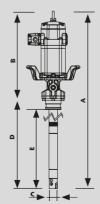
MODELS						
PART No.	APPLICATION	WEIGHT				
531 411	400 lb (185 kg) drum, flange mounted.	55 lb (25 kg)				
531 421	120 lb (50 kg) drum, flange mounted.	49 lb (22 kg)				
531 431*	Bulk tote	57 lb (26 kg)				

\* Includes adaptor 753 110 to fit a 3" cam-lock connector for use with totes, grease bags and tanks.

TECHNICAL DATA						
Pump ratio	40:1					
Continuous duty flow rate	7.5 lb/min (3,5 kg/min)					
Maximum free flow	22 lb/min (11 kg/min)					
Air pressure operating range	20 - 200 psi (1,5 - 14 bar)					
Maximum outlet pressure	8,000 psi (560 bar)					
Air motor effective diameter	4 1/2" (115 mm)					
Air motor stroke	4" (100 mm)					
Air consumption (1)	26.5 scfm (750 NI/min)					
Air inlet	1/2" NTPF					
Fluid outlet	1/2" NTPF					
Wetted and seal materials	Cast Iron / Steel / Hard chromed steel / UHMW PE / NBR / PTFE					
Noise level (2)	80 dB					
Manual	853 814					

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





NLGI-2, 70 °F (21 °C) CAPACITY CURVE										
Fluid pressure		Cycles/min			AIR CONSUMPTION					
0	45	90	135	180	225	1				
300   4351					T.,	2000 70				
275 † 3988				7 bar -	(100 psi)	1800 63				
250 † 3625 225 † 3263						1600 † 56				
200 2900						1400   50				
	762	0000	5 b	oar (72 psi)		1200 42				
150 2175	Zbar 100 p	(12)		21- (42	.	1000 † 35				
125 1812	ha .			• 3 bar (43 ps	"	800 - 28				
100 † 1450 75 † 1087	bar (72 psj)			ĺ		600 21				
50 725 3 bay	(43 psi)					400 † 14				
25 362	psi)					200 † 7				
00.						0 0				
bar psi kg/r	min				4.0	NI/min scfm				
0		4	6	8	10					
0 lb/n	nin <sup>4,4</sup>	8,8	13,2	17,6	22	Outlet pressure Air consumption				