SureMatic Lubricator Air-operated, PDI Systems

1

General

The SureMatic Lubricator comprises a piston discharge pump actuated by air, controlled by an electric solenoid valve (optional). Models are available to handle grease and oil lubricants.

Application

Unit discharges lubricant on single action air powered forward stroke and actuates all positive displacement injectors connected to the single line centralized distribution network. A two directional outlet check valve vents pressure back to reservoir on spring powered return stroke.

Lubricator can be used with the following injectors:

- + FL-32, -33, -42, -43 Series Injectors (*refer to Datasheet #27432*).
- + ZJB Series Injectors with Injector Reset Valve (IRV) (refer to Datasheets #24371, 26422, 24631 & 24274).

Features

- + Three reservoir sizes available
- + Weighted follower plate (no spring necessary)
- + Low liquid level switch

Technical Data

	Lubricator Reservoir Capacity	1, 2, 3.5 and 5 liter		
	Discharge	8cc		
	Pressure Ratio/Lubricant Discharge/Inlet Air	18:1		
	Minimum Permissible Inlet Air Pressure ¹	40 psi (3 bar)		
All Models	Maximum Permissible Inlet Air Pressure ¹	150 psi (10 bar)		
AII M	Air Consumption per Stroke @ 75 psi (free air)	1 liter		
	Maximum Grease Pressure with 80 psi Air Pressure	1450 psi (100 bar)		
	Maximum Stroke Rate (full stroke, 8cc)	Approximately 8 strokes/min.		
	Maximum Ambient Temperature Range	0°F to 180°F (-18°C to 82°C)		
	Materials	Aluminum pump; Buna N seals; acrylic reservoir		
	Lubricant	Semi-Fluid Grease, NLGI grade 2		
odels	Lubricant Electrical Level Control Switch (single pole momentary contact) ²	Semi-Fluid Grease, NLGI grade 2 Closes contact at low level		
se Models				
Grease Models	Electrical Level Control Switch (single pole momentary contact) ²	Closes contact at low level		
Grease Models	Electrical Level Control Switch (single pole momentary contact) ² Maximum Voltage	Closes contact at low level 125-250 VAC		
Grease Models	Electrical Level Control Switch (single pole momentary contact) ² Maximum Voltage Contact Rating	Closes contact at low level 125-250 VAC 6 amp at 125 VAC; 3 amp at 250 VAC		
	Electrical Level Control Switch (single pole momentary contact) ² Maximum Voltage Contact Rating Weight (empty)	Closes contact at low level 125-250 VAC 6 amp at 125 VAC; 3 amp at 250 VAC 9.5 kg (21 lb)		
	Electrical Level Control Switch (single pole momentary contact) ² Maximum Voltage Contact Rating Weight (empty) Lubricant	Closes contact at low level 125-250 VAC 6 amp at 125 VAC; 3 amp at 250 VAC 9.5 kg (21 lb) 0il, 150-8000 SSU (32-1700 cSt)		
Oil Models Grease Models	Electrical Level Control Switch (single pole momentary contact) ² Maximum Voltage Contact Rating Weight (empty) Lubricant Electrical Level Control Switch ³	Closes contact at low level 125-250 VAC 6 amp at 125 VAC; 3 amp at 250 VAC 9.5 kg (21 lb) 0il, 150-8000 SSU (32-1700 cSt) Closes contact at low level		
	Electrical Level Control Switch (single pole momentary contact) ² Maximum Voltage Contact Rating Weight (empty) Lubricant Electrical Level Control Switch ³ Maximum Voltage	Closes contact at low level 125-250 VAC 6 amp at 125 VAC; 3 amp at 250 VAC 9.5 kg (21 lb) 0il, 150-8000 SSU (32-1700 cSt) Closes contact at low level 240 VAC		

¹80 psi maximum with Bijur Type T PDIs.

³ Switch polarity can be reversed by turning switch upside down on stem.

BIJUR DELIMON INTERNATIONAL

(919) 465 4448 LOCAL (800) 631 0168 TOLL-FREE (919) 465 0516 FAX

WWW.BIJURDELIMON.COM

2250 Perimeter Park dr., Suite 120 Morrisville, NC 27560

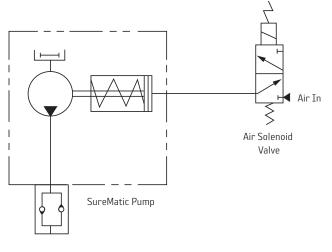




² Thru suitable relays can operate remote alarm or indicator.

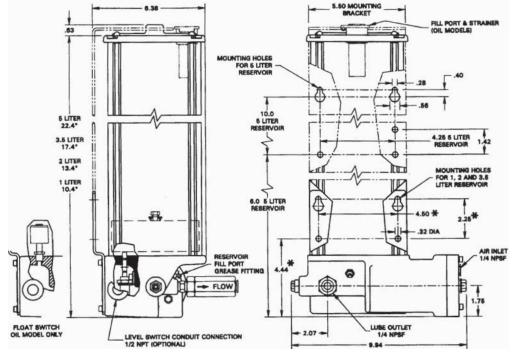


Operation



Installation

Measurements for 2 and 3.5 liter reservoirs.



Start Up Instructions

Fill reservoir with recommended grease for application. The grease must be able to be dispensed through a centralized distribution tubing network under pressure without separation or breakdown of the grease composition.

Actuate the SureMatic Lubricator several times until grease discharge is free of air, then connect unit to centralized system distribution feed line. To bleed air that may be trapped under the follower plate, remove the set screw (15) from lid and depress top of bleed valve in follower.

WARNING

Do not overfill reservoir with grease. Reservoir may burst if pressurized above 150 psi, creating risk of personal injury (grease models only).

Measurements shown in inches.

Mount in an upright vertical position only.

BIJUR DELIMON INTERNATIONAL

(919) 465 4448 LOCAL (800) 631 0168 TOLL-FREE (919) 465 0516 FAX

WWW.BIJURDELIMON.COM

2250 Perimeter Park dr., Suite 120 Morrisville, NC 27560



How to Order

Name	Reservoir Capacity	Lubricant	Part #	
SureMatic Lubricator	1 liter	Oil	18144C	
		Grease	18143C	
	2 liter	Oil	18145C	
		Grease	18140C	
	3.5 liter	Oil	18146C	
		Grease	18141C	
	5 liter	Oil	18147C	
		Grease	18142C	

When ordering, specify by name, description and part number, e.g. SureMatic Lubricator, 1 liter, Oil, Part #18144C.

Accessories

Solenoid and Air Regulator Assembly

For pressure regulated air and electrically controlled impulses to the SureMatic oil lubricator, a solenoid valve and pressure regulator valve assembly is available. Conveniently pre-assembled to a single base plate, the unit can be bolted directly to the lubricator through pre-drilled holes or mounted separately as a stand-alone device. Order by part #21975 (tubing and connection fittings to lubricator not included).

SS2200 Remote Controller (Progressive Systems)

The SS2200 is a microprocessor-based programmable controller specifically designed to control centralized lubrication systems. It operates on time or machine cycles and controls electric or air-driven pumps. It is housed in a NEMA 4x polycarbonate enclosure with a clear front cover. Precise LED indicators clearly display idle, lube or fault modes and a three-digit numerical display used during both programming and lube system operation.

Part #
SS2200
21975
20311-3
24476





BIJUR DELIMON INTERNATIONAL

(919) 465 4448 LOCAL (800) 631 0168 TOLL-FREE (919) 465 0516 FAX

WWW.BIJURDELIMON.COM

2250 Perimeter Park dr.., Suite 120 Morrisville, NC 27560

35484 · R8 11/13



Service Parts

Order by part number and name description shown below. When ordering parts, include complete lubricator part number and serial letters shown on nameplate. Example: Replacement reservoir for SureMatic lubricator 18141 serial letter SG is part #21203-2, 3.5 liter capacity.

Illustrations and specifications are not binding in detail. Designs are subject to modification and improvement without notice.

T .		D <i>i i i</i>	-		
Item	Description	Part #	_		
L	Reservoir: 1 liter (Oil)	56158	_		
	Reservoir: 2 liter (Oil)	56158-1			
	Reservoir: 3.5 liter (Oil)	56158-2		(15)	
	Reservoir: 5 liter (Oil)	56158-3	_ \		
	Reservoir: 1 liter (Grease)	53764	_11)
	Reservoir: 2 liter (Grease)	56118	10		
	Reservoir: 3.5 liter (Grease)	56118-1			
	Reservoir: 5 liter (Grease)	56118-2	-@///		
2	Grease fitting	25102-5	8	/EconoMTE/	(22)
	Screw	22102-24	24		Θ
	Vent	A4256C	/ /	\ <u>}</u> }== <u></u> == <u></u> }	
	Switch actuator O-ring (Grease)	22100-3			
i	Level switch (Oil)	B9640	- 23		5
	Level switch (Grease)	21623	- \		
	Screw	43582	_ `		
	0-ring	20337-204	_		
I	Spring	15007C-23	- -	A A A A P	
0	Lockwasher	21608-2	- 4		
1	Nut	28357-4	_		
2	Return spring	21620C	_	13 12	
3	Piston O-ring	27139		\sim \circ	\sim \sim
.4	Air piston O-ring	20337-229	21	Washer tie rod	22076-5
L5	Set screw	22104-44	22	Tie rod: 1 liter	21231C-1
.6	Prime/vent valve	24750C	_	Tie rod: 2 liter	21231C-2
7	Washer rubber	27267C		Tie rod: 3.5 liter	21231C-8
.8	Washer	31177		Tie rod: 5 liter	21231C-9
9	Choke	B8367C	23	Reservoir gasket	22100-26
20	Locknut tierod	22188-3	24	Follower seals	22100-47

WARNING

Grease lubricator models have a rod installed in the reservoir to keep follower from moving during shipment. This rod must be removed prior to filling reservoir with grease. With unit in an upright position, unscrew set screw (15). Carefully put aside for later use. Remove rod from reservoir by pulling through opening and re-insert set screw.

To ensure maximum service life, incoming air must be dry. Always use a suitable FRL unit (Filter/Regulator/Lubricator) to control air to recommended operating range.

Note: Air control valve must be a 3/2 type valve to exhaust cylinder after each stroke.

BIJUR DELIMON INTERNATIONAL

(919) 465 4448 LOCAL (800) 631 0168 TOLL-FREE (919) 465 0516 FAX

WWW.BIJURDELIMON.COM

2250 Perimeter Park dr., Suite 120 Morrisville, NC 27560