

Micro-Fog® and Oil-Fog **Tool Lubricators** *** - *******

Installation & Maintenance Instructions

	L17 -
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Port 6....3/4" 8 1" A....1-1/4"

B....1-1/2

Option 00..Not applicable Lubricator Type M...Micro-Fog O Oil-Foa

Flow

...Bi-directional (Oil-Fog only) P....Unidirectional

Reservoir

4...1 litre (1 quart U.S.) metal, remote fill, sight glass D...1 litre (1 quart U.S.) metal, drain, sight glass

H...2 litre (2 quart U.S.), metal, drain, sight glass

J ...8 litre (2 gal U.S.), metal, drain, sight glass K...20 litre (5 gal U.S.), metal, drain, sight glass

Thread Form

...PTF B....ISO Rc taper G....ISO G parallel

TECHNICAL DATA

Fluid: Compressed air

Huid: Compressed air
Maximum pressure: 17 bar (250 psig)
Operating temperature: * -20° to +80°C (0° to +175°F)
* Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Start point (minimum flow required for lubricator operation) at 6,3 bar (90 psig) inlet pressure: 3,8 dm³/s (8 scfm)

Typical flow at 6,3 bar (90 psig) inlet pressure and 0,5 bar (7 psig) pressure drop: 130 dm³/s (275 scfm) Nominal bowl sizes:

1 litre (1 quart US) 2 litre (2 quart US)

8 litre (2 gallon UŚ)

20 litre (5 gallon US)

Recommended lubricants: See page N/AL.8.900.935 Manual drain connection: 1/8" pipe thread Materials:

Body: Aluminum Reservoir:

1 litre (1 quart US): Aluminum 2 litre (2 quart US) and larger: Steel**

Reservoir sight glass: Pyrex Sight-feed dome:

Standard: Transparent nylon Optional: Pyrex and aluminum Elastomers: Neoprene and nitrile

** The 8 and 20 litre (2 and 5 gallon) steel reservoirs are ASME rated according to the ASME Pressure Vessel Code, Section VIII

REPLACEMENT ITEMS

Service Kit (iliciades iterris circiea	
on exploded view)	5771-02
Liquid level lens kits	
1 litre (1 quart US) bowl (25, 27 thru31)	2273-22
2 litre (2 quart US) bowl (40 thru 43, 49)	2273-04
8 litre (2 gal US) bowl (52 thru 55)	2274-01
20 litre (5 gal US) bowl (52 thru 55)	2274-01
Manual drain (19, 20, 21)	619-50
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INSTALLATION

- 1. Shut-off air pressure. Install lubricator in air line -
- vertically (reservoir down),
 with air flow in direction of arrow on body,
- Micro-fog and Oil-fog Uni-directional models: upstream of cycling valves.
- Oil-fog Bi-directional models:
- upstream or downstream of cycling valves.
- as close as possible to the device being lubricated,
- . Oil-fog models Not more than 5,2m (15 feet) from the device being lubricated, and at the same height or higher than the device.
- 2. Connect piping to proper ports using pipe thread sealant on male threads only. Do not allow sealant to enter
- 3. Turn bowl (32) into body until arrowhead on bowl is aligned with or to the right of the arrowhead on the body.

RECOMMENDED LUBRICANTS

Fill reservoir with a good quality, non-detergent, light, misting type oil for compressed air tools. See Norgren publication N/AL.8.900.935

FILL RESERVOIR (UNIDIRECTIONAL OIL-FOG LUBRICATORS WITH 1 AND 2 QUART RESERVOIRS) Remove fill plug (8), add oil, and reinstall fill plug. Fill plug can be removed and oil added without shutting off air pressure to the lubricator. Oil level must always be visible in lens on metal reservoirs. DO NOT OVERFILL.

FILL RESERVOIR (BIDIRECTIONAL OIL FOG LUBRICATORS, OIL FOG LUBRICATORS WITH 2 AND 5 GALLON RESERVOIRS, ALL MICRO-FOG LUBRICATORS)

Shut off inlet air pressure and reduce pressure in reservoir to zero. Remove fill plug (8), add oil, and reinstall fill plug. Do not remove the fill plug when the reservoir is pressurized, as oil will blow out the fill plug hole. These lubricators can be filled under pressure only if equipped with the optional quick fill cap (12), which requires a quick fill connector and oil pump. Oil level must always be visible in lens on metal reservoirs. DO NOT OVERFILL

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ADJUSTMENT

- Turn on system pressure.
- Adjust lubricator drip rate only when there is a constant rate of air flow thru the lubricator. Monitor drip rate thru sight feed dome (14).
- 3. Oil-Fog Lubricators Determine the average rate of flow thru the lubricator. Turn green rotator (14) to obtain one drop per minute for each 5 dm³/s (10 scfm). For example, if the average flow is 19 dm³/s (40 scfm), set the drip rate at 4 drops per minute. Turn rotator counterclockwise to increase and clockwise to decrease the drip rate
- Micro-Fog Lubricators Determine the average rate of flow thru the lubricator. Turn red rotator (14) to obtain the recommended drops per minute. See Drip Rate Chart. Turn knob counterclockwise to increase and clockwise to decrease the drip rate.

Drip Rate Chart for Micro-Fog Lubricators

	3/4" Ported Units		1", 1-1/4", 1-1/2" Ported Units	
	Flow	Drops/	Flow	Drops/
	dm ³ /s (scfm)	Minute	dm ³ /s (scfm)	Minute
	5 (10)	8	5 (10) ` ′	10
	9 (20)	10	12 (25)	14
	19 (40)	12	24 (50)	21
	28 (60)	14	35 (75)	28
	38 (80)	16	47 (100)	35
	47 (100)	18	59 (125)	41
	57 (120)	20	71 (150)	47
	66 (140)	22	83 (175)	54
	76 (160)	24	94 (200)	60
	, ,		106 (225)	66
			118 (250)	73
			130 (275)	80
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5. Monitor the device being lubricated for a few days following initial adjustment. Adjust the drip rate if the oil delivery at the device appears either excessive or low.

DISASSEMBLY

- Shut off inlet pressure. Reduce pressure in inlet and outlet lines to zero. Loosen fill plug (8).
 Disassemble in general accordance with the item numbers
- on exploded view. Do not remove the manual drain unless replacement is necessary. Remove and replace drain assembly only if drain malfunctions

CLEANING

- 1. Clean parts using warm water and soap
- 2. Dry parts. Blow out internal passages in body with clean, dry compressed air.
- 3. Inspect parts. Replace parts found to be damaged.

ASSEMBLY

- 1. Lubricate o-rings and seals, the portion of the manual drain body (19) that contacts the bowl, and the hole in the manual drain body that accommodates the stem of drain valve (20) with o-ring grease. 2. Lubricate threads on aluminum sight feed dome (16) with a
- small amount of anti-seize compound.

 3. Assemble lubricator as shown on exploded view.
- 4. Assemble the 1 litre (1 quart) liquid indicator parts (25, 26, 27, 28, 29, 30) to reservoir. Apply a 0,9 to 1,8 kg (2 to 4 pound) clamping force to upper and lower brackets (26) Tighten screws (25) to 0,9 to 1,1 N-m (8 to 10 in.-lb).
- 5. Torque Table N-m (Inch-Pounds) 3 (siphon tube fitting) 0,6 to 0,8 (5 to 7) 5 (generator), 7 (check valve) 14, 16 (dome), 23 (nut) 2,3 to 2,8 (20 to 25) 2,3 to 2,8 (20 to 25)
- 6. Apply increasing torque to the six reservoir adapter screws (35) in a crisscross pattern. Apply final torque of 3,4 to 4,5 N-m (30 to 40 inch-pounds).
- 7. Turn bowl (32) into body until arrowhead on bowl is aligned with or to the right of the arrowhead on the body.

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under *Technical Data*.

In lubrication applications some oil mist may escape from the point of use to the surrounding atmosphere. Users are referred to safety and health standards for limiting oil mist contamination and utilization of protecting equipment

Before using these products with fluids other than air, for nonindustrial applications, or for life-support systems consult







