



LubriMist™ Oil Mist Generator
Model "JR" – 240 VAC
INSTALLATION AND OPERATION
MANUAL

INTRODUCTION

A LubriMist™ oil mist system is a centralized lubrication system that generates, conveys, and automatically delivers lubricant to bearings, gear boxes, chains, and sliding surfaces in various industrial machinery and equipment. This publication provides instruction and information for the LubriMist™ Oil Mist Generator Unit Model “JR”. Design, application, and distribution of LubriMist™ oil mist are covered in other publications. Call the Lubrication Systems Company office nearest you for additional information.

DESCRIPTION

The "JR" *LubriMist™* oil mist generator is designed for use in small to intermediate size oil mist systems located in Class 1 Division 2 Group C/D hazardous areas. The “JR” is equipped with many important monitoring features. As with all *LubriMist™* oil mist generators, the “JR” utilizes the proprietary Vortex mist generation technology, which delivers superior reliability and performance. Model “JR” is available in 40, 100, 300, and 500 Bearing Inch (BI) oil mist generating capacities which provide an oil mist supply range from 0.36 to 15.0 SCFM (0.6 to 25 cu.M/Hour).

The unit is fully enclosed in a corrosion resistant aluminum cabinet. The heavy gauge stainless steel oil mist reservoir has a 5 gal. (19 Lit.) operating capacity and includes an oil level sight glass, a pressure relief valve, and a mist pressure gauge. The oil level control, which includes an oil flow solenoid valve, a level control switch, and a pressure gauge, automatically maintains a constant oil level in the reservoir. The immersion oil heater with internal thermostat and the oil temperature gauge are standard equipment.

Standard air controls include an integral air filter/pressure regulator with gauge and an air supply pressure gauge. Standard instrumentation includes high and low mist pressure, high and low oil level, and low oil temperature. Local indication of unit status is provided by highly visible red/green operating status lights.

All electrical devices are wired to a common electrical control box which houses terminal strips and a common dry contact, remote alarm relay.

The cabinet enclosure makes the unit drip proof and suitable for a wide range of industrial applications. See the Model Code Table for detail.

**LubriMist™ Oil Mist Generator Model “JR”
Model Code Table**

Model No. (Example indicates Standard Options)		
JR-100-ABAXX		
OPTION DESCRIPTION	OPTION CODES	
Generator Head Size	40 100 300 500	40 BI 100 BI 300 BI 500 BI
Oil Reservoir Fill	A B	Auto Bulk Fill w/ High & Low Level Switch Manual Fill w/ Low Level Switch
System Power	A B	120VAC 240VAC
Construction Materials (Main Unit)	<u>Code</u> A S O B T P	<u>Cabinet</u> Aluminum Carbon Steel Stainless Steel Aluminum Carbon Steel Stainless Steel <u>Reservoir</u> Carbon Steel (discontinued) Carbon Steel (discontinued) Carbon Steel (discontinued) Stainless Steel Stainless Steel Stainless Steel
Back-up Unit	X	No Back-up Unit
Construction Materials (Back-up Unit) <small>Includes mounting and piping to main unit</small>	<u>Code</u> A S O B T P	<u>Reservoir</u> Carbon Steel (discontinued) Carbon Steel (discontinued) Carbon Steel (discontinued) Stainless Steel Stainless Steel Stainless Steel
Yellow Metals Option	X N N	Includes Brass Components No Brass (Main Console) No Brass (Main & Back-up Console)

INSTALLATION

Location / Mounting

Choose a central convenient location, allowing enough room for air, electrical, oil, and drain connections. Ensure easy access to the front of the unit when the cabinet door is open. For units with back-up generators, ensure that adequate rear access is maintained for servicing the back-up unit. Install the “JR” cabinet in an upright position and secure with four anchor bolts that are suitable for the type of foundation used (i.e. wood, concrete, steel etc.) Anchor bolts are not provided with the unit.

Mist Distribution System Connection

Connect the oil mist distribution system to the oil mist outlet (2” NPT) located on the top right side of the cabinet. Do not use Teflon tape or conventional pipe dope. A non-hardening thread lubricant such as *LubriMist™* Part No. 77-600-947 should be used on the pipe thread.

Compressed Air Supply

Connect a clean, dry compressed air supply to the inlet air supply (1/2” NPT) located on the right side of the unit. The inlet air supply should be capable of delivering the maximum SCFM rating for each particular mist head size. See the Ordering Code Table for the specific model. Mist generating flow rates for the available mist heads are indicated below. Recommended air service is at 55 PSIG. This is the minimum required air pressure necessary to ensure that the unit is operable at the upper operating output capacity of the mist head.

Mist Head Size	Mist Flow Range SCFM (cu.M/Hour)	Minimum Air Supply SCFM @ PSIG (cu.M/Hour @ Bar)
40 BI	0.36 - 1.4 (0.6 - 2)	1.5 @ 55 (2 @ 3.8)
100 BI	1.2 - 3.2 (2 - 5)	3.5 @ 55 (6 @ 3.8)
300 BI	3.0 - 9.0 (5 - 15)	10.0 @ 55 (17 @ 3.8)
500 BI	6.0 - 15.0 (10 - 25)	17.0 @ 55 (29 @ 3.8)

Note: Maximum air supply pressure is 125 PSI (8.6 Bar).

Pressurized Oil Supply Connection

The Model “JR” is standard equipped with instrumentation that automatically maintains a constant oil level in the oil reservoir. As oil is consumed during oil mist generation, make up oil is supplied to the reservoir through a solenoid valve, which turns on and off the central pressurized oil supply. If the particular Model “JR” is not equipped with the auto fill feature, the oil reservoir can still be serviced from a central pressurized oil supply. The pressurized oil fill connection (1/2” NPT) is located on the lower left rear corner of the cabinet.

