



# **AIR PREPARATION UNITS**

LUBRICATOR WITH METAL BOWL Series L1M

Cat No L1M - 02 - C

### LUBRICATOR WITH METAL BOWL - 1/8, 1/4, 3/8, 1/2, 3/4, 1"

#### Features

- General For higher pressure range above 10 bar
- Suitable for Modular mounting
- □ Fog / Mist type
- □ Fine adjustment of lubrication
- Aluminium bowl guard, bayonet type (3/4 and 1" only)
- Lubrication proportional to flow



#### **Technical Specification**

| Model  | L13M                                  | L14M                             | L15M   | L17M           | L17M         |  |  |  |
|--|---------------------------------------|----------------------------------|--|----------------|--------------|--|--|--|
| Medium   | Compressed air - Filtered             |                                  |  |                |              |  |  |  |
| Port size  | NPT 1/8 (G1/8)<br>NPT 1/4 (G1/4)      | NPT 1/4 (G1/4)<br>NPT 3/8 (G3/8) | NPT 1/4 (G1/4)<br>NPT 3/8 (G3/8)<br>NPT 1/2 (G1/2) | NPT 3/4 (G3/4) | NPT 1 (G1)   |  |  |  |
| Flow rate in scfm (NI / min) $^{@}$                          | 15.93 (455)<br>47.25 (1350)           | 46.55 (1330)<br>105 (3000)       | 47.25 (1350)<br>114.5 (3270)<br>197.8 (5650)       | 254.3 (7200)   | 317.8 (9000) |  |  |  |
| Max supply pressure in psi (bar)                             | 280 (20)                              |                                  |  |                |              |  |  |  |
| Ambient / Medium temperature                                 | 41°-140°F (5°-60°C)                   |                                  |  |                |              |  |  |  |
| Min operating flow in scfm (NI/min)                          | 0.424 (12)                            | 1.41 (40)                        | 1.6 (45)   | 1.75 (50)      | 1.75 (50)    |  |  |  |
| Bowl capacity in ounce (ml)<br>(at maximum condensate level) | 0.68 (20)                             | 3.4 (100)                        | 6.8 (200)  | 6.8 (200)      | 6.8 (200)    |  |  |  |
| Recommended oil  | ISO VG 32 (Servo System 32)           |                                  |  |                |              |  |  |  |
| Bowl material  | Aluminium                             |                                  |  |                |              |  |  |  |
| Installation   | Vertical (as in the picture)          |                                  |  |                |              |  |  |  |
| Materials of construction                                    | Aluminium, Bronze, Steel, SS, Nitrile |                                  |  |                |              |  |  |  |
| Optional accessories *                                       | Clamp, Modular mounting kit           |                                  |  |                |              |  |  |  |
| Weight in lb (Kg)  | 0.44 (0.20)                           | 1.21 (0.55)                      | 1.87 (0.85) 3.04 (1.38) 3.02 (1.37                 |                | 3.02 (1.37)  |  |  |  |

@ Supply pressure 85 psi (6 bar) , pressure drop  $\Delta p$  = 7 psi (0.5 bar) (For standard models ).

\* For details refer optional accessories Cat No APA - 02 - C

#### Precautions

- 1. Note the direction of flow before installation and connect piping accordingly.
- 2. Flush pipings for dirt, dust, rust and other foreign particles.
- 3. Install in clean atmosphere.
- 4. Nipples with taper threads ( R ) to be used with teflon tape. Ensure teflon tape does not enter the unit during tightening. Nipples with straight threads ( G ) to be used with sealing washer.
- 5. Oil may be filled when under pressure. However it is recommended to vent the air completely before filling the oil.





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#### **Flow Graphs**



#### **Principle of Operation**

A part of the air entering the Lubricator through "IN" pressurises the bowl chamber.

Flow of full air goes through "OUT" deflecting the "Deflector" and creating pressure drop below the sight dome .

The pressure in the Bowl presses the oil through the suction tube and the oil flows through the sight dome. All the oil drops seen through the sight dome mixes with the main stream air and comes through "OUT". The required oil drops can be adjusted by the adjusting needle.

#### How to order

| L1 | $\bigcirc ($   | $\bigcirc \bigcirc \bigcirc \bigcirc$           |  |         | $\bigcirc$                                      |  |  |
|----|--|---|--|---------|---|--|--|
|    | Body   | Body & Port size                                |  |         | Metal bowl                                      |  |  |
|    | 390 (360)<br>391 (361)<br>491 (461)  | NPT1/8 (G1/8)<br>NPT1/4 (G1/4)<br>NPT1/4 (G1/4) |  | M<br>L# | Without level indicator<br>With level indicator |  |  |
|    | 492 (462) NPT3/8 (G3/8)<br>591 (561) NPT1/4 (G1/4)<br>592 (562) NPT3/8 (G3/8)<br>593 (563) NPT1/2 (G1/2) |   | * Applicable for L14, L15 & L17 series only. |         |   |  |  |
|    | 794 (764)<br>795 (765)   | NPT3/4 (G3/4)<br>NPT1 (G1)                      |  |         |   |  |  |

Ordering example : Lubricator with Metal bowl without level indicator - 3/8 port size (with NPT 3/8 (G3/8) port) : Ordering No: L1492-M (1462-M)