

spirax sarco ML3M

TI-P504-03
CH Issue 3



International Symbol

Monnier Miniature Compressed Air Lubricator

Description

The ML3M Monnier miniature compressed air lubricator provides lubrication for pneumatic systems where space is restricted and flowrates are low.

Principal features:

- Once set compensates for varying air flowrates.
- Easy setting of oil/air ratio: approximately 5% of each oil drop enters the air stream.
- Tamper-proof feature; prevents unauthorised adjustment.
- Non-return valve in oil pick up system ensures lubrication for short air flows.
- Polycarbonate bowl.
- External black anodised finish.

Tamper-proof feature

As standard, each lubricator is supplied with a 3/16" diameter tamper-proof ball that may be pressed or tapped into the top of the sight dome adjustment area after the oil rate has been set (See 'Principle of operation', page 3). This prevents any further adjustment by unauthorized personnel.

Optional extras:

For further technical information regarding the following options, see page 2:

- Mounting bracket.
- Easy fit stainless steel bowl guard.

Sizes and pipe connections

1/4" screwed BSP (BS 21-Rp)

Operating limits

Maximum working pressure	10 bar g
Maximum working temperature	50 °C

Materials

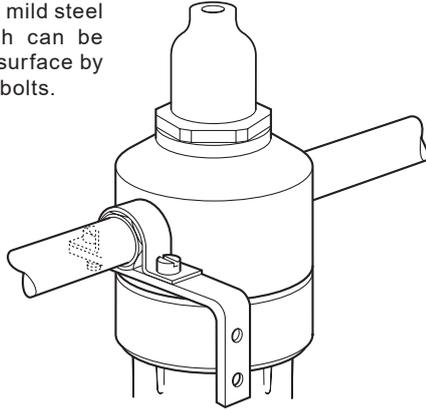
Part	Material
Head	Aluminium
Bowl	Polycarbonate
Capacity valve	Acetal
Seals	Nitrile rubber
Bowl guard (optional extra)	Stainless steel



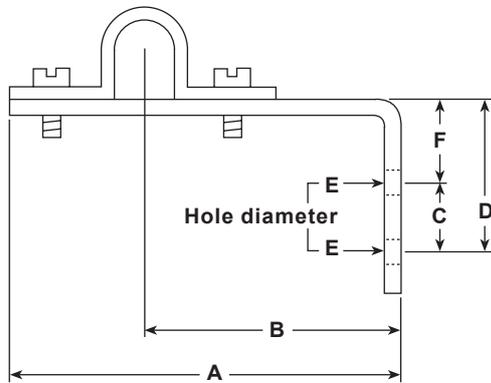
Optional extras

Type 3 mounting bracket

This is a zinc plated, mild steel angle bracket which can be attached to any flat surface by means of screws or bolts.

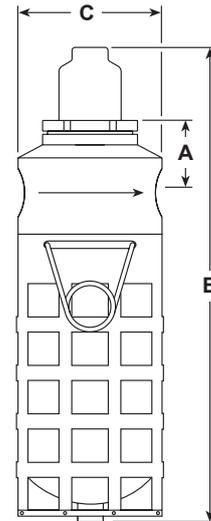


Dimensions (approximate) in millimetres



A	B	C	D	E	F
75	50	25	65	13	20

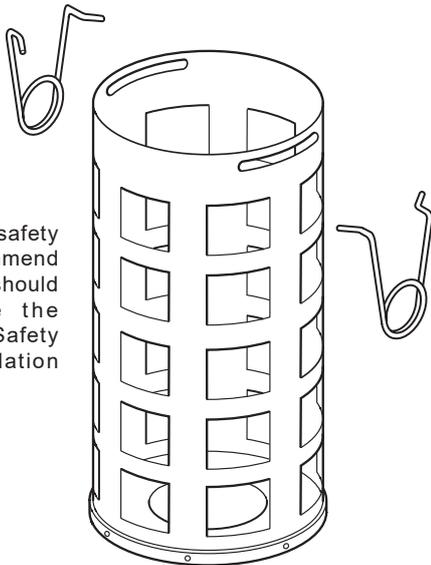
Dimensions, capacity and weights (approximate) in mm, ml and kg



Withdrawal distance: E Without bowl guard
E1 With bowl guard

A	B	B1	C	E	E1	Bowl capacity	Weight
48	130	139	38	10	40	20	0.15

Bowl guard



In the interest of safety Spirax Sarco recommend that a bowl guard should be fitted - See the 'Warning' under 'Safety information installation and maintenance'.

Principle of operation

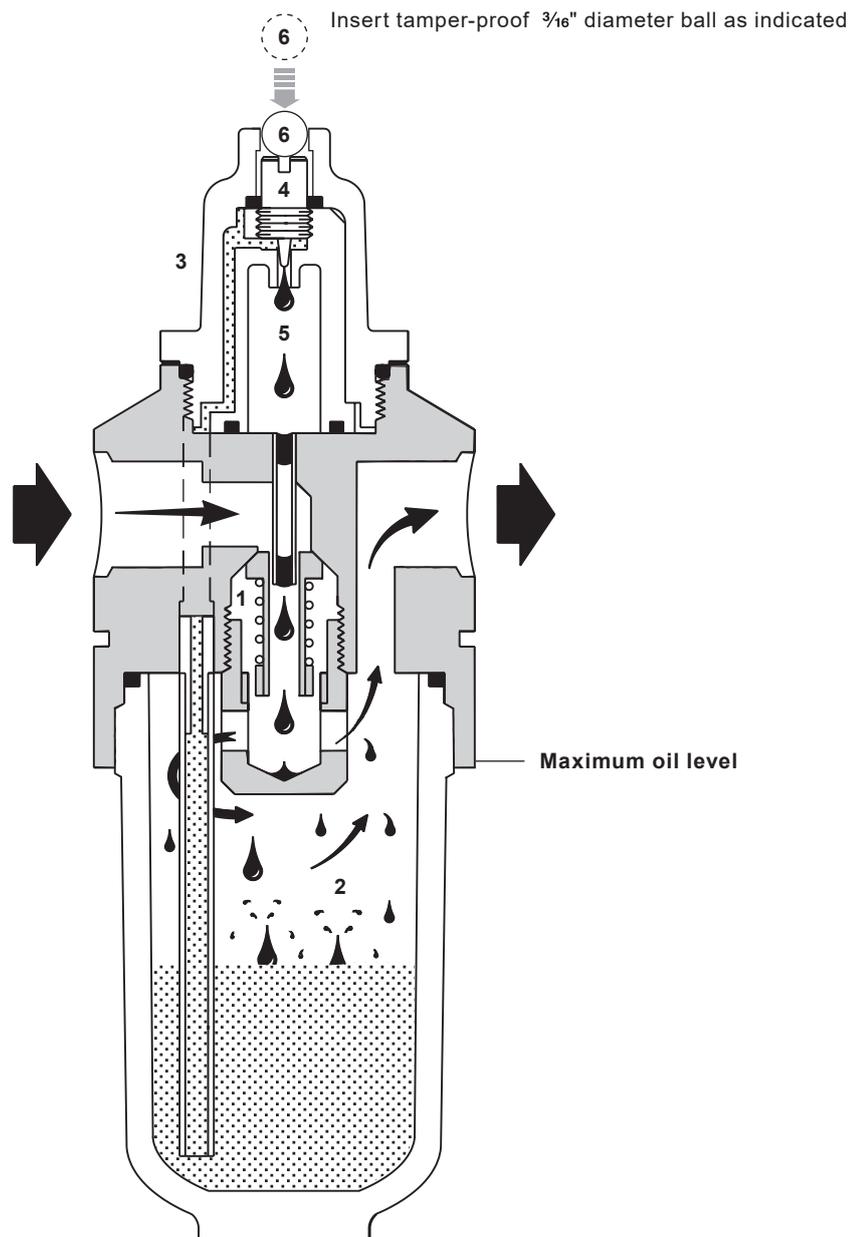
Monnier lubricators are used to maintain the proper ratio of oil and air and to maximize the performance and guarantee long life of pneumatic machinery.

Once the oil rate has been set, a Monnier lubricator provides reliable automatic lubrication. The Monnier design ensures efficient and dependable performance.

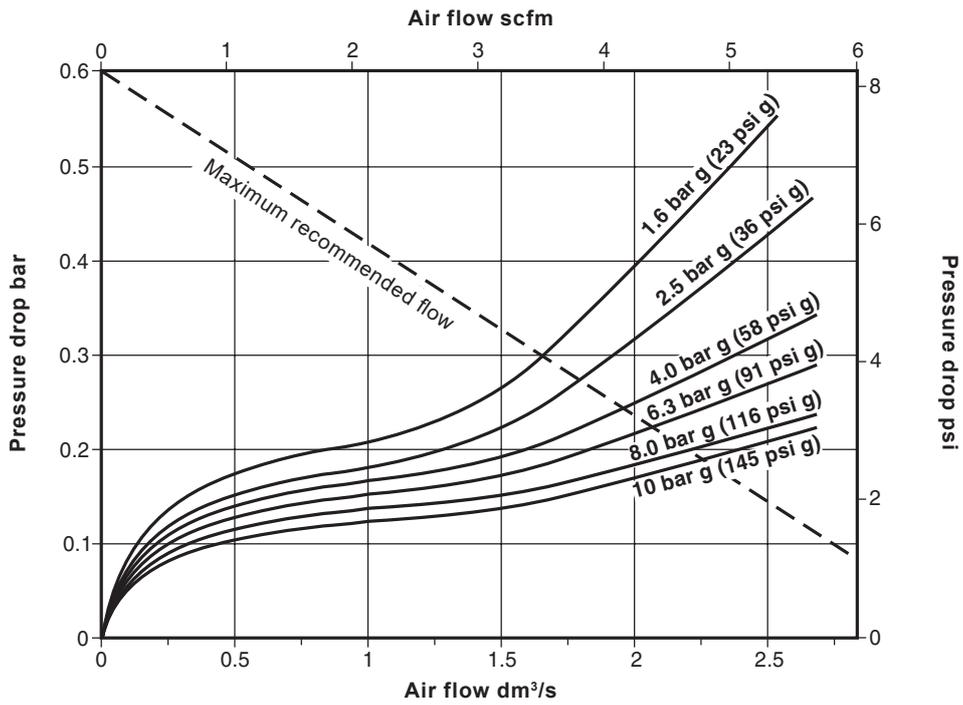
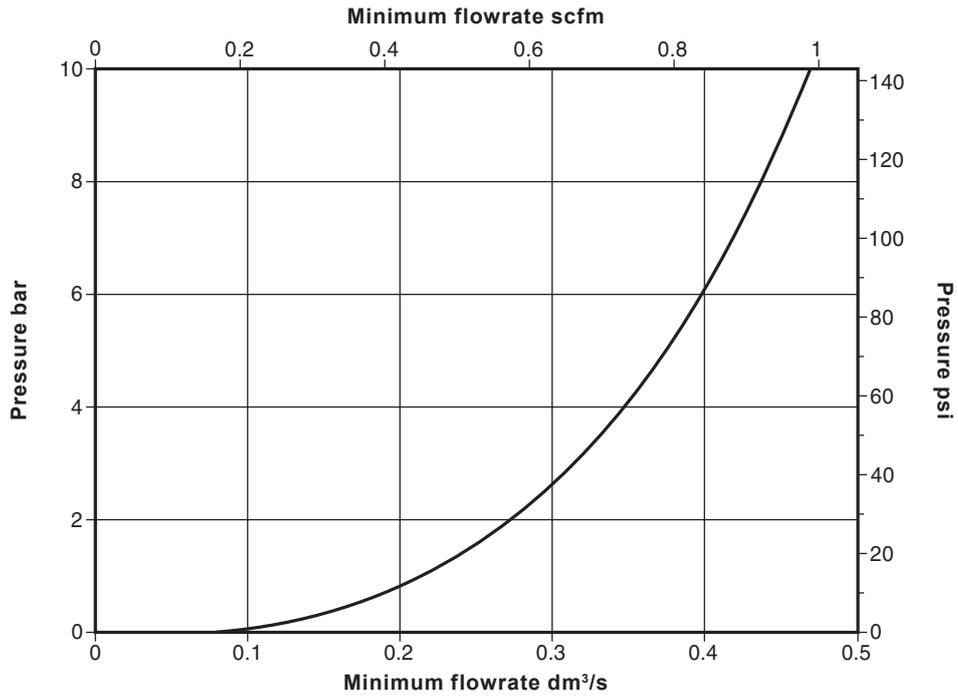
The Monnier Venturi valve (1) automatically maintains the ratio of oil to air that the user selects. It assures lubrication even at the lowest possible air flow (see Capacities on page 3). By automatically increasing the air pressure behind the oil in the main reservoir (2) in proportion to the increased air flow, the Venturi valve provides the desired degree of lubrication regardless of air flowrate.

The Monnier sight dome (3) is moulded from transparent polycarbonate that can be viewed at a full 360°. It includes an adjustment screw (4) for setting the oil rate, and a sight-feed tube (5) where the oil can be visually measured, drop by drop.

As standard, each lubricator is supplied with a 3/16" diameter tamper-proof ball (6) that may be pressed or tapped into the top of the sight dome adjustment area after the oil rate has been set. This prevents any further adjustment by unauthorized personnel.



Capacities



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P504-04) supplied with the product.

Warning

Polycarbonate bowls are attacked by phosphate ester fluids, solvents, paint thinners and carbon tetrachloride. These and similar substances should never be allowed to come into contact with the bowl. Certain compressor lubricating oils also contain additives harmful to polycarbonate and, where there is any doubt, we recommend, in the interest of safety that a bowl guard be fitted.

Lubricant

The oil used must be compatible with the equipment being served by the lubricator, and with the materials of construction of the lubricator itself.

Installation note

Fit into a horizontal pipeline with the air flow in the direction of the arrow, and bowl vertically downwards. The lubricator should be fitted as close as possible to the unit it is serving. A Monnier MF2M filter should be fitted upstream to prevent any contaminants reaching the system to be lubricated.

How to order

Example: 1 off ML3M Monnier miniature compressed air lubricator having ¼" screwed BSP connections.

Note: If any optional extras are required, they must be clearly specified on the order.

Spare parts

The spare parts available are detailed below.
No other parts are supplied as spares.

Available spares

Bowl assembly	A, B
Sight dome assembly	C, D, E
Bowl guard assembly (optional extra)	X, Y

How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state the size and type of unit.

Example: 1 off Bowl assembly for a 1/4" ML3M Monnier miniature compressed air lubricator.

