



Cert. No. LRQ 0963008

ISO 9001

spirax/sarco

ML3

TI-P052-07
 CH Issue 4


International Symbol

Spirax-Monnier Miniature Compressed Air Lubricator

Description

The ML3 Spirax-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.
- Non-return valve in oil pick up system ensures lubrication for short air flows.
- Polycarbonate bowl to BS 6005.
- Easy fit metal bowl guard available.
- External black epoxy finish.

Optional extras

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

- Mounting bracket.
- Bowl guard.

Sizes and pipe connections

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

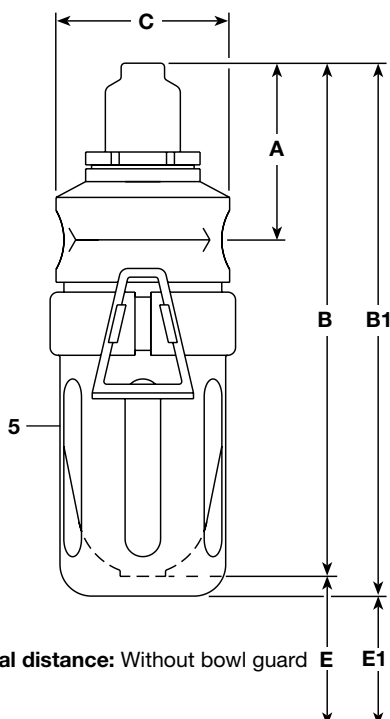
Operating limits

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

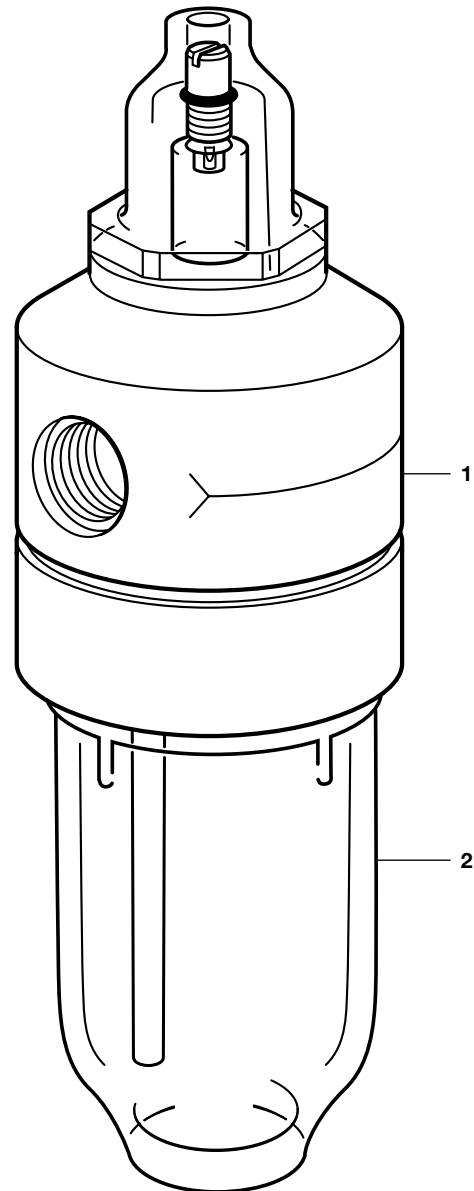
Dimensions, capacity and weights

(approximate) in mm, ml and kg

A	B	B1	C	E	E1	Bowl capacity	Weight
45	126	135	44	10	40	20	0.15



Withdrawal distance: Without bowl guard **E** **E1** With bowl guard



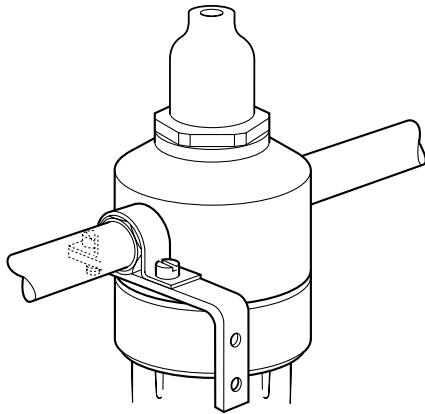
Materials

No.	Part	Material
1	Head	Aluminium
2	Bowl	Polycarbonate
3	Venturi	Brass
4	Seals	Nitrile rubber
5	Bowl guard (optional extra)	Aluminium

Optional extras:

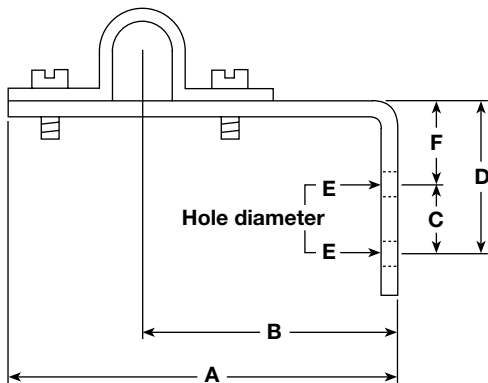
Type 3 mounting bracket

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



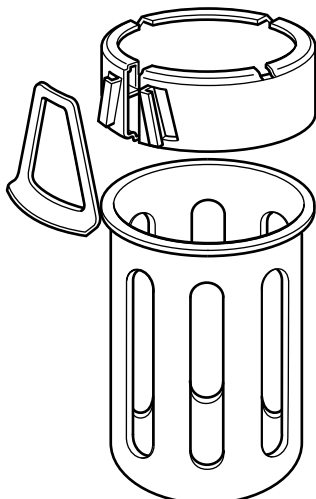
Dimensions (approximate) in millimetres

A	B	C	D	E	F
58	38	22.1	41	5	12.7

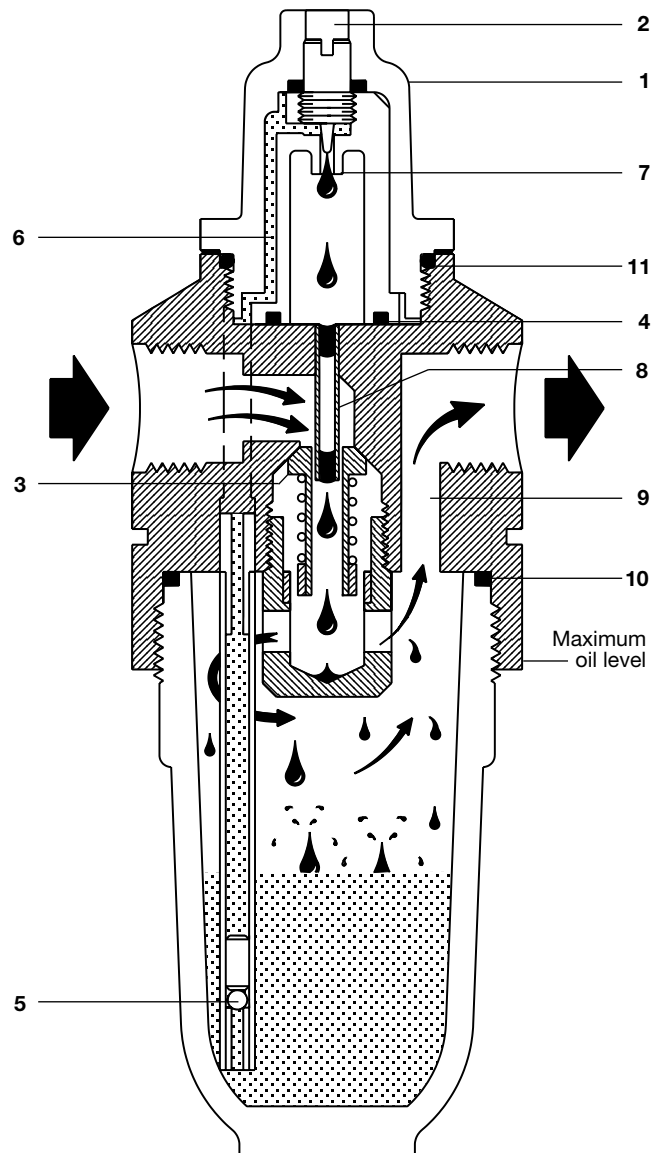


Bowl guard

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

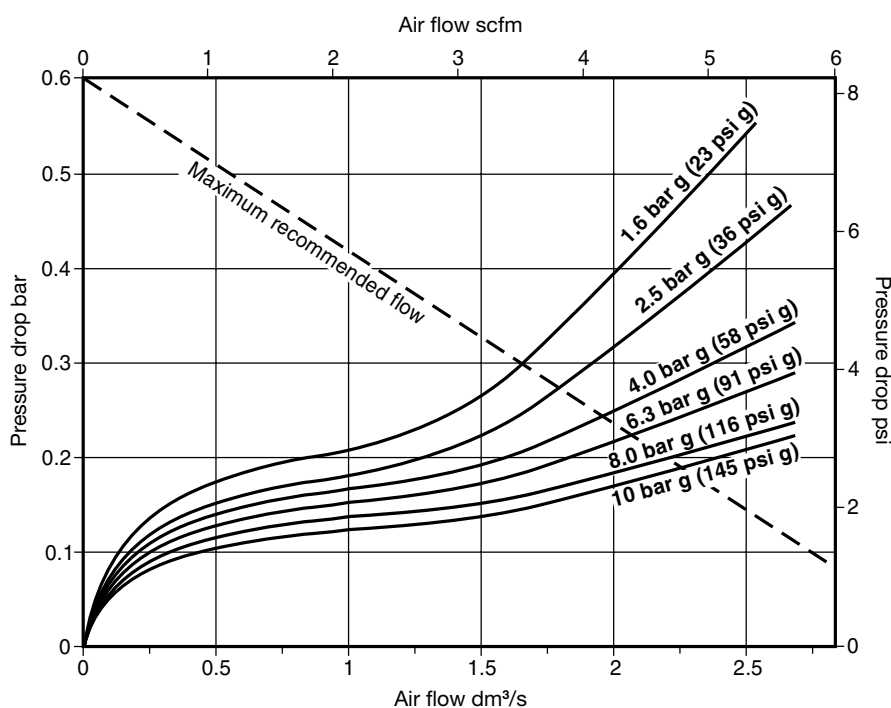
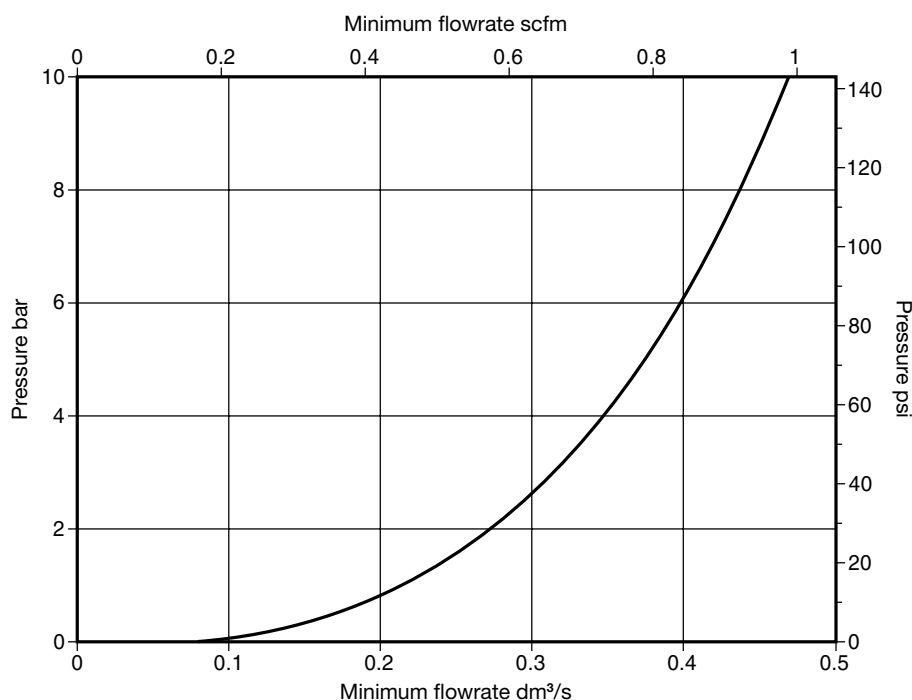


How does it work



Compressed air entering the lubricator pressurises the complete unit. Air flow passing through or around the Venturi valve (3) causes a slight pressure reduction, which is sensed in the sight dome (1). This pressure differential causes oil to flow up the pick up tube (past the non-return valve 5), and into the transfer port (6) in the sight dome, to the drip point (7). The oil drips formed are carried into the air stream through the transfer tube (8) and are atomised in the Venturi area. The larger oil particles are returned by gravity to the bowl, whilst the very small oil particles mix fully with the compressed air and are carried out into the system through port (9).

Capacities



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P052-09) 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. Generally $^{\circ}\text{C}$.

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 Spirax-Monnier MF2 filter should be fitted upstream to prevent any contaminants reaching the system to be lubricated.

How to order

Example: 1 off Spirax-Monnier 1/4" screwed BSP ML3 miniature compressed air lubricator.

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	X, Y, Z

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" ML3 Spirax-Monnier miniature compressed air lubricator.

