

Spirax Monnier IL1 International Compressed Air Lubricator

To adjust

The oil requirement for most pneumatic systems is one drop of oil for every 5 dm³/s of free air used. To vary the drip rate use a screw driver to alter the setting of the oil adjustment screw (12). Rotating it clockwise will decrease the oil drip rate: conversely anti-clockwise will increase it.

To fill bowl

Shut off air supply. Partly unscrew oil filler plug (8) and allow pressure from the bowl to vent (this will take a few seconds). As soon as the pressure is vented fully, unscrew filler plug and replenish with oil up to the bottom of the lubricator head. Replace filler plug.

Lubricant

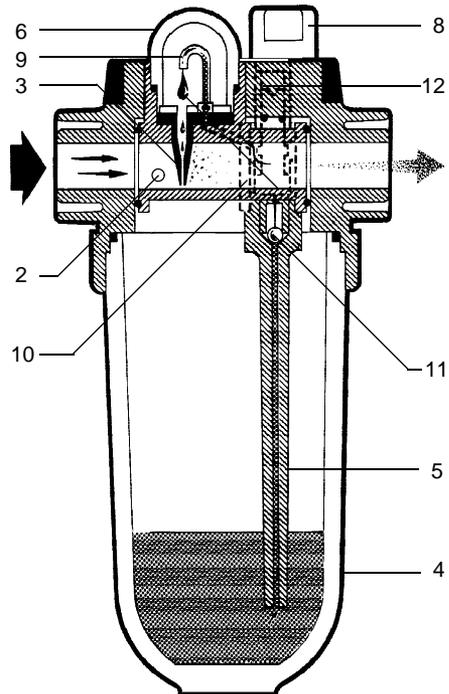
The oil used must be compatible with the equipment being served by the lubricator and with the materials of construction of the lubricator itself. Generally the oil will be of the free fogging type in the viscosity rang of 7.5 to 64 centistokes (45 to 280 seconds Redwood No 1) at 100°F.

How does it work

Air entering the lubricator pressurises the bowl through the orifice (2). Air passing the flapper valve (3) causes a slight pressure reduction which is sensed through a small hole in the flapper valve itself. This lower pressure is sensed in the sight dome (6). Due to the difference in pressure between the main bowl (4) and the sight dome (6) oil is forced up through the feed tube (5) past the non-return valve (11), through the oil metering chamber (10) into the drip tube (9) and then out through the flapper valve (3) where it enters the main air stream. All the oil seen passing through the sight dome (6) is fed by the flapper valve into the main air stream where it is atomised.

Warning

Polycarbonate bowls are attacked by phosphate ester fluids, 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 metal bowl or bowl guard be fitted.



Spare parts

AVAILABLE SPARES

Bowl Assembly Polycarbonate, or metal (with or without sight level)	A,B
Sight Dome and Filler	
Plug Assembly	O,P,Q,R,S,T

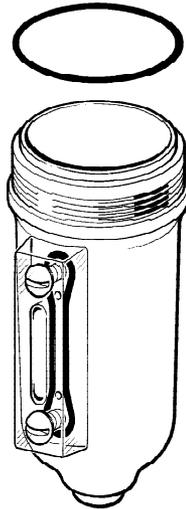
How to order

Example:- 1 — Polycarbonate Bowl Assembly
for ¼" Spirax-Monnier IL1.

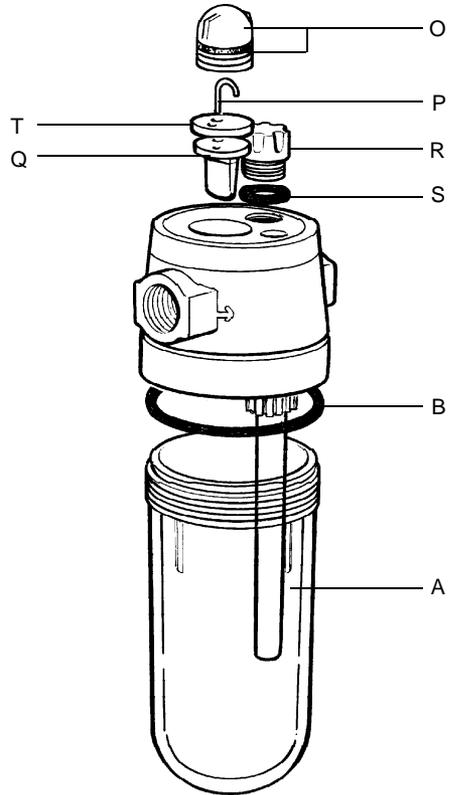
To Service

Shut off air supply. Ensure there is no pressure in the lubricator by slowly unscrewing the oil filler plug R and venting.

To clean the bowl or sight dome, unscrew, having removed the bowl guard if fitted, and clean by washing in soap and water only. Dry with lint free cloth. (Refill with correct grade of oil). Tighten firmly, by hand.



Metal Bowl
With sight level



Spirax-Monnier Products

General Safety, Installation and Maintenance Guidelines

WARNING

As with all Pressurised Systems, do NOT attempt ANY Installation or Maintenance function if there is ANY pressure in the product or connected system.

Spirax-Monnier

Spirax Monnier compressed air products are of well proven and simple design, with high natural levels of designed safety built in. However, used or installed incorrectly, their performance and that of the system they are protecting or controlling, may suffer. The information given indicates the product limiting conditions, maintenance and installation requirements and any specific component disposal needs.

Product Maintenance - See Over

Installation and Operation

1. Filters, Filter/Regulators, Lubricators, Flow Meters, Separators and Drain Traps should be fitted in horizontal pipelines, with the bowls vertically downwards.
2. Regulators and Ball Valves can be installed in any position.
3. On Pressure Regulators and combined Filter/regulators, a Pressure Gauge can be connected to one of the $\frac{1}{8}$ " ports. The gauge should be selected to cover the maximum pressure range of the main Control Spring. The gauge will indicate the downstream or controlled pressure.
4. Ensure that the Control Spring range for Regulators and Filter/Regulators fully meets the pressure requirements of the system.
5. There are Maximum Operating Pressures, and Maximum Operating and Environmental Temperatures for each product. These are shown in the table below.
6. Adequate space should be provided around any product to allow easy access for routine servicing requirements.
7. Products fitted with a Bowl (Polycarbonate or Metal) should be adequately drained - manually or automatically - to reduce the potentially harmful effects of water carryover.
8. **WARNING** Polycarbonate Bowls and Sight Domes, and Sight Levels fitted to Metal bowls, may be attacked by Phosphate Ester based fluids, Solvents, Chemical cleaners, Carbon Tetrachloride, etc. These and other similar substances should never be allow to come into contact with these product components. Certain compressor lubricating oils also contain additives harmful to these components. Where there is any doubt, we recommend, in the interests of safety, that Bowl Guards or Metal Bowls are fitted.
9. Local regulations may restrict the use of this product below the conditions quoted.
10. For more detailed information on any individual product, please ask for the appropriate Technical Information Sheet listed in the table.

For Maximum Pressures/Temperatures see overleaf
--

MAXIMUM PRESSURES/TEMPERATURES

FILTERS	Polycarbonate Bowl		Metal Bowl		Metal Bowl with Sight level		DISPOSAL CLASS	TI
	bar	°C	bar	°C	bar	°C		
MF2	10	50	-	-	-	-	1 & 3	P050-05
IF2/D/A	10	50	17	80	17	70	1 & 2	P500-01
IC3/4/DA	10	50	17	80	17	70	1 & 2	P501-01
IXI	10	50	17	70	17	70	1 & 2	P057-01
SF3/A	-	-	17	80	17	70	1 & 3	P050-03

REGULATORS

MR1/2/3	21 bar 70°C : CONTROL RANGES : 0.2/2. 0.3/4, 0.7/9 bar						1 & 3	P051-01
IRI	20 bar 70°C : CONTROL RANGES : 0.2/3.5, 0.5/1 bar						1 & 2	P058-01
SR2	21 bar 70°C : CONTROL RANGES : 1.3 - 17.0 bar						1 & 3	P570-01
SR3	21 bar 70°C : CONTROL RANGES : 0.2/4, 0.3/9 bar						1 & 3	P570-03

FILTER REGULATORS

IP2/A/D	10	50	17	80	17	70	1 & 2	P510-01
	RANGES : 0.2/3.5, 0.5/10 bar							
MP2	10	50	-	-	-	-	1 & 3	P054-01
	RANGES : 0.2/2.0, 0.3/4.0, 0.7/9.0 bar							
MPC2	10	50	-	-	-	-	-	P054-04
	RANGES : 0.2/2.0, 0.3/4.0, 0.7/9.0 bar						1 & 3	

LUBRICATORS

ML3	10	50	-	-	-	-	1 & 3	P052-07
IL1	10	50	17	80	17	70	1 & 2	P059-01
SL3	-	-	17	80	17	70	1 & 3	P052-04

OTHER PRODUCTS

IFM2	10	50	-	-	-	-	1 & 2	P580-01
S.M.S.	-	-	17	70°C	-	-	1 & 3	P050-17
BALL	all to 15 bar & 45°C							
VALVES (all)	(see performance graph on TI for full details)						1 & 4	P560-01
DRI-LINE	-	-	16	80°C	-	-	1 & 3	P050-07

DISPOSAL

1. Some plastic and/or rubber components
2. Main body Zinc - epoxy coated
3. Main body Aluminium - epoxy coated
4. Brass and Steel
5. Electronic Components

Note

Customers are reminded that under UK and EC Health, Safety and Environmental Law, when returning products to Spirax Sarco they must provide information on any hazards and the precautions to be taken due to contamination residues or mechanical damage which may present a health, safety or environmental risk. This information must be provided in writing including Health and Safety data sheets relating to any substances identified as hazardous.