Atlas Copco Air Line Accessories

Atlas Copco

Get maximum productivity from your tools

Atlas Copco air preparation units are designed to help you get maximum productivity from your tools. They ensure minimal pressure drop and thus minimum energy losses in the air distribution system, benefiting the environment and cutting your operating costs. The lifetimes of your tools will be extended by using air preparation units and with that comes lower repair costs and less downtime.

A correct air installation ensures productivity and good total economy.

Filter – FIL

Water and dirt in your compressed air system will cause extensive corrosion damage and wear.

Productivity

Atlas Copco filters are equipped with a cyclone system. Using centrifugal force, this separates out a high percentage of the heavier solid water particles, while the filter ensures that the amount of dirt entering your tool is kept to a minimum. This means longer working cycles for the tools and minimum service time.

Regulator– REG

Atlas Copco regulators ensure optimal flow at the specific flow rates required by Atlas Copco tools, or any other pneumatic tools.

Energy efficiency

By installing a regulator you will ensure that there will not be any unnecessary consumption of compressed air. The regulators reduce a variable primary pressure to a practically constant secondary pressure with a minimum of pressure drop.

Productivity

The regulator will optimize the performance of your tool, ensure torque accuracy and boost productivity.

Lubricator – DIM

Atlas Copco oil lubricators ensure a long, efficient and trouble-free life for your pneumatic tools and components.

Productivity

The use of a lubricator will increase the power in vane motors by about 10-15%.

Energy efficiency

With the use of a lubricator you will prolong the lifetime of a vane motor up to three times and the motor will work much more efficiently, and with less friction.

Filter – FIL

Regulator – REG

Lubricator – DIM

Air preparation unit MINI-K's main application is to prepare the air for pneumatic components. MINI-K units have a 1/4" BSP connection thread, a composite housing made of polyamide 66 and the bowls are made of polycarbonate.

Working temperature
0ºC to +50ºC at 10 bar

Operating pressure
Inlet pressure 0-10 bar
Outlet pressure 0.5-8 bar

Standard filter
30 µm

Pressure gauge
1/8" BSP

Model	Economical air flow l/s	Maximum air flow l/s	Bowl	Filter condensate drainage	Max condensate capacity cm^3	Max oil capacity cm^3	Weight kg	Ordering No.
Filters								
MINI FIL 08K-B	12	30	Polycarbonate	Manual	12	-	0.1	9092 0000 01
Regulators								
MINI REG 08K	10	20	-	-	-	-	0.11	9092 0000 61
Lubricators								
MINI DIM 08K	9	23	Polycarbonate	-	-	35	0.09	9092 0000 91
Filter/regulator								
MINI F/R 08K	12	17	Polycarbonate	Manual	12	-	0.12	9092 0001 21
Filter/regulator+lubricator								
MINI F/RD 08K	9	14	Polycarbonate	Manual	12	35	0.32	9092 0001 51

NOTE: **Economical air flow**: 8 bar inlet pressure, 6.3 bar outlet pressure, 0.2 bar pressure drop.

Maximum air flow: 10 bar inlet pressure, 6.3 bar outlet pressure, 1 bar pressure drop.

All separate units, mounting brackets, assembly kits and pressure gauges need to be ordered separately. MINI-K F/RD unit is delivered complete with mounting bracket, assembly kit and pressure gauge.

Air preparation unit MINI-B's main application is to prepare the air for pneumatic components and tools with low air consumption. MINI-B has a 1/4" BSP connection thread and the housing is made of diecast zinc. The bowls are made of polycarbonate or the unit has metal bowls in zinc.

Working temperature
0ºC to +50ºC at 10 bar

Operating pressure
Inlet pressure 0-16 bar
Outlet pressure 0.5-8 bar

Standard filter
30 µm

Pressure gauge
1/8" BSP

Model	Economical air flow l/s	Maximum air flow l/s	Bowl	Filter condensate drainage	Max condensate capacity cm^3	Max oil capacity cm^3	Weight kg	Ordering No.
Filters								
MINI FIL 08B-B	12	24	Polycarbonate	Semi/automatic	22	-	0.25	9093 0032 11
MINI FIL 08B-C	12	24	Polycarbonate	Manual	22		0.25	9093 0032 41
MINI FIL 08B-D	13	24	Metal	Manual	22		0.25	9093 0032 71
Regulators								
MINI REG 08B	9	47.5	-	-	-	-	0.30	9093 0033 01
MINI REG 08B-LP	9	47.5	-	-	-	-	0.30	9093 0073 21
MINI REG 08P	8	47.5	-	-	-	-	0.30	9093 0000 31
Lubricators								
MINI DIM 08B	12	23	Polycarbonate	-	-	45	0.25	9093 0033 31
MINI DIM 08B-D	12	23	Metal	-	-	45	0.25	9093 0033 61
Filter/regulator								
MINI F/R 08B-B	9	38	Polycarbonate	Semi/automatic	22	-	0.35	9093 0033 91
MINI F/R 08B-C	9	38	Polycarbonate	Manual	22	-	0.35	9093 0034 21
Filter/regulator+lubricator								
MINI F/RD 08B-B	9	14.8	Polycarbonate	Semi/automatic	22	45	0.75	9093 0034 51
MINI F/RD 08B-C	9	14.8	Polycarbonate	Manual	22	45	0.75	9093 0034 81
Filter+regulator+lubricator								
MINI FRD 08B-B	9	13.8	Polycarbonate	Semi/automatic	22	45	0.95	9093 0062 11
MINI FRD 08B-C	9	13.8	Polycarbonate	Manual	22	45	0.95	9093 0062 41

NOTE: **Economical air flow**: 8 bar inlet pressure, 6.3 bar outlet pressure, 0.2 bar pressure drop.

Maximum air flow: 10 bar inlet pressure, 6.3 bar outlet pressure, 1 bar pressure drop.

All separate units, mounting brackets, assembly kits and pressure gauges need to be ordered separately. The MINI F/RD and FRD units are delivered complete with mounting bracket, assembly kit and pressure gauge.

The MIDI Optimizer is suitable for more than 90% of the Atlas Copco tool range and is the best choice for assembly tools, percussive tools, drills, nibblers and grinders up to Turbo. The MIDI Optimizer has a 1/2" BSP connection thread and a housing and bowl of high-tech polymer. The bowl has a highly chemical resistant polypropylene insert and the bowl is directly screwed to the housing for easy handling.

MIDI Optimizer self-regulating nano-lubricator
Adjusts automatically to the flow demand and ensures that the right amount of oil is supplied to the motor at all flow rates. This minimizes the lubrication needed. The nano oil mist, with a particle size of 200 nm, can be transported by the air stream up to 40 m. This means there is no oil in the hose and direct lubrication is not necessary. The lubricator can be refilled during operation.

Working temperature
-40ºC to +60ºC at 10 bar
+2ºC to +60ºC at 10 bar for filters
NOTE: For dry compressed air, ice formation must be avoided.

Operating pressure
Inlet pressure 0-16 bar
Outlet pressure 0.5-8 bar

Standard filter
30 µm

Pressure gauge
1/4" BSP
Included in F/RD and FRD units

Model	Economical air flow l/s	Maximum air flow l/s	Bowl	Filter condensate drainage	Max condensate capacity cm^3	Max oil capacity cm^3	Weight kg	Ordering No.
Filters								
MIDI Optimizer FIL A	-	117	Polymer, plastic insert	Automatic	60	-	0.3	9093 0021 01
MIDI Optimizer FIL M/S	-	117	Polymer, plastic insert	Manual/semi auto	60	-	0.3	9093 0021 02
Regulators								
MIDI Optimizer REG	-	97	-	-	-	-	0.35	9093 0021 05
MIDI Optimizer REG LP	-	97	-	-	-	-	0.35	9093 0021 06
Lubricators								
MIDI Optimizer DIM	31	120	Polymer, plastic insert	-	-	90	0.3	9093 0021 10
Filter/regulator								
MIDI Optimizer F/R A	-	90	Polymer, plastic insert	Automatic	60	-	0.5	9093 0021 12
MIDI Optimizer F/R M/S	-	90	Polymer, plastic insert	Manual/semi auto	60	-	0.5	9093 0021 13
Filter/regulator+lubricator								
MIDI Optimizer F/RD A	31	55	Polymer, plastic insert	Automatic	60	90	1.0	9093 0021 16
MIDI Optimizer F/RD M/S	31	55	Polymer, plastic insert	Manual/semi auto	60	90	1.0	9093 0021 17
Filter+regulator+lubricator								
MIDI Optimizer FRD A	31	55	Polymer, plastic insert	Automatic	60	90	1.1	9093 0021 24
MIDI Optimizer FRD M/S	31	55	Polymer, plastic insert	Manual/semi auto	60	90	1.1	9093 0021 25

NOTE: **Economical air flow**: 8 bar inlet pressure, 6.3 bar outlet pressure, 0.2 bar pressure drop.

Maximum air flow: 10 bar inlet pressure, 6.3 bar outlet pressure, 1 bar pressure drop.

All separate units, mounting brackets, assembly kits and pressure gauges need to be ordered separately. The MIDI Optimizer F/RD and FRD units are delivered complete with mounting bracket, assembly kit and pressure gauge.

The high flow MAXI-B air preparation unit's main application is to prepare the air for pneumatic tools which are large air consumers when long distribution hoses and multi connectors are used. A good example is Atlas Copco Turbo grinders. The MAXI-B has a diecast zinc housing and aluminum bowls with polypropylene inserts and the bowl is directly screwed to the housing for easy handling.

Working temperature
-10ºC to +50ºC at 10 bar

NOTE: For dry compressed air, ice formation must be avoided.

Operating pressure
Inlet pressure 0-17.5 bar
Outlet pressure 0.5-12 bar

Standard filter
30 µm

Pressure gauge
1/4" BSP

Model	Economical air flow l/s	Maximum air flow l/s	Bowl	Filter condensate drainage	Max condensate capacity cm^3	Max oil capacity cm^3	Weight kg	Ordering No.
Filters								
MAXI FIL 25B-B	106	190[a]	Metal	Semi/automatic	130	-	0.9	9093 0074 21
Regulators								
MAXI REG 25B	85	333	-	-	-	-	1.2	9093 0074 61
MAXI REG 25B-LP	85	333	-	-	-	-	1.2	9093 0074 81
Lubricators								
MAXI DIM 25B	87	295	Metal	-	-	500	0.8	9093 0075 21
Filter/regulator								
MAXI F/R 25B-B	84	316	Metal	Semi/automatic	130	-	1.5	9093 0075 51
Filter/regulator+lubricator								
MAXI F/RD 25B-B	82	244	Metal	Semi/automatic	130	500	2.8	9093 0075 81
MAXI FRD 25B-B	81	209	Metal	Semi/automatic	130	500	3.3	9093 0076 01

[a] 8 bar inlet pressure, 1 bar pressure drop.

NOTE: **Economical air flow**: 8 bar inlet pressure, 6.3 bar outlet pressure, 0.2 bar pressure drop.

Maximum air flow: 10 bar inlet pressure, 6.3 bar outlet pressure, 1 bar pressure drop.

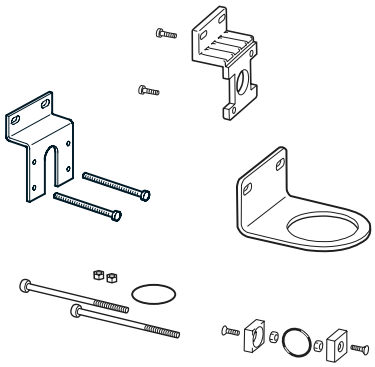
All separate units, mounting brackets, assembly kits and pressure gauges need to be ordered separately. The MAXI F/RD and FRD units are delivered complete with mounting bracket, assembly kit and pressure gauge.

Optional Accessories

Common accessories

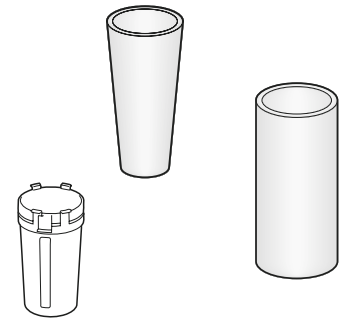
Designation	Ordering No. MINI-K	MINI-B	MIDI OPTIMIZER	MAXI-B
Mounting bracket kit	9090 1902 00	9092 0063 01	9093 0022 01	9093 0076 15
Assembly kit	9090 1901 90	9092 0062 71	9093 0022 02	9093 0076 31

Are included in combination units (FD, FTD, F/RD and FRD)
Common accessories have to be ordered separately for separate units.



Filter (FIL) accessories (30 µm filter element is included with all filters)

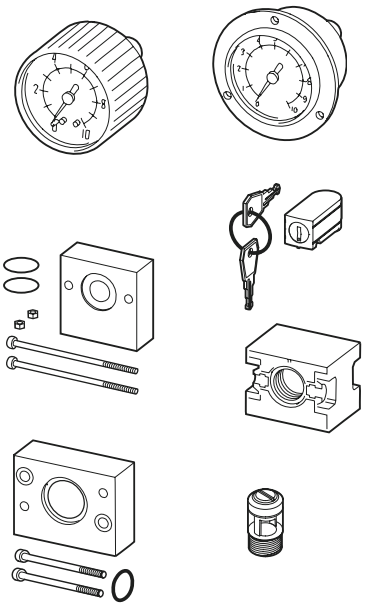
Designation	Ordering No. MINI-K	MINI-B	MIDI OPTIMIZER	MAXI-B
Filter element				
30 µm	9090 1898 00	9092 0063 31	9093 0023 04	9093 0076 61
5 µm		9092 0063 61	9093 0023 05	9093 0076 71
Bowl guard		9092 0063 91		



Regulator (REG) accessories

Designation	Ordering No. MINI-K	MINI-B	MIDI OPTIMIZER	MAXI-B
Pressure gauge				
0-10 bar				
Ø 40 mm	9090 1907 00	9090 1907 00		
Ø 50 mm		9090 1172 00	9090 2052 00	
0-16 bar				
Ø 49 mm			9090 0239 00	9090 0239 00
Ø 50 mm		9090 1657 00		
Ø 63 mm				9093 0076 45
Panel mounting pressure gauge				
0-10 bar				
Ø 50 mm		9090 1173 00	9090 1173 00	
0-16 bar				
Ø 63 mm				9093 0076 43
Key lock for regulator -LP		9092 0074 11	9092 0074 11	9092 0074 11

Pressure gauge 0-10 bar is included in the combination units (F/RD and FRD)
Pressure gauge has to be ordered separately for separate units.



Lubricator (DIM) accessories

Designation	Ordering No. MINI-K	MINI-B	MIDI OPTIMIZER	MAXI-B
Air distribution block kit	9090 1900 90	9092 0064 51	9093 0022 03	9093 0076 41
Bowl guard		9092 0063 91		
Glass sight dome		9090 1121 00		9090 1873 00

FRL stand

Designation	Ordering No.
Suits all models	9090 2101 00

Optimizer Air Tool Oil

Optimizer air tool oil
Atlas Copco Optimizer air tool oil is a white, oil based lubricant for pneumatic tools. It has excellent antiwear properties and contains additives preventing oxidation and foaming. Optimizer air tool oil provides a better working environment, compared to conventional mist lubrication oils and is recommended when stringent demands are placed on the working environment.

- Provides a better working environment.
- Excellent antiwear properties.
- Minimizes wear on components.

Technical Data

Temperature range	-25ºC to +70ºC
Density at 15ºC	869 kg/m^3
Viscosity at 40ºC	22 mm^2/s
Pour point	-48ºC
Flash point COC	>170ºC

Model	Ordering No.
Optimizer 0.5 liter	9090 0000 02
Optimizer 1 liter	9090 0000 04
Optimizer 4 liter	9090 0000 06
Optimizer 10 liter	9090 0000 08

Single point lubricator DOSOL

Accurate lubrication for tools in intermittent service.

The Atlas Copco DOSOL system for direct lubrication is based on an injector pump which meters out the oil in exact doses, actuated by pulses of compressed air. The oil dosage can be regulated from a fraction of a drop to a full drop.

- **Exact amount** – Precision injector, adjustable for exact amount of oil.
- **Oil directly at the tool** – The oil is conveyed through a capillary tube directly to the lubrication point.

A single-point lubricator (SPL) consists of an injector pump fitted to a valve body, converting interruptions in compressed air flow into pulses. In the majority of cases, an oil bowl is fitted on each lubricator.

Every DOSOL SPL unit can be finely tuned to inject from 1 to 1/10 of a drop of oil in 40 steps (30 to 3 mm^3). Every DOSOL SPL unit includes as standard a counter with a switch that allows the lubricator to operate every first, fifth or tenth tool cycle.

The adjusting knob features a positive stop at both maximum and minimum settings, which means that a zero setting is not possible.

The preset quantity of oil is supplied to the tool through a small-bore nylon tube inside the air hose. 7.5 m of oil-filled nylon tubing is included as standard.

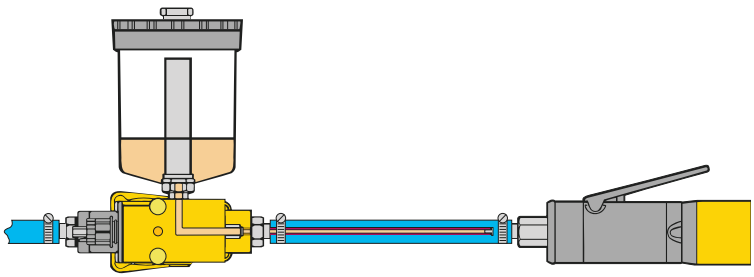
Multiple-point lubricator DOSOL

For supplying lubricant to an unlimited number of lubrication points on a machine or in a pneumatic system.

The DOSOL multiple-point lubricator (MPL) consists of a number of JECT 01 oil metering pumps assembled into a “package” with a common BASE baseplate. A stack may contain up to ten JECT 01 units. Several such assemblies may be used together.

- All oil pumps are supplied with oil via the BASE from an oil container or central oil reservoir. A line for pneumatic signals from the equipment to be lubricated is also connected to the BASE.
- The lubricant is conveyed through small-bore nylon tubing which should be ended with check valves.
- With the TEN counter the lubricator can be actuated every first, fifth or tenth tool cycle.

Every DOSOL MPL unit can be finely tuned to inject from 1 to 1/10 drop of oil in 40 steps (30 to 3 mm^3). This helps to minimize the oil dose. The adjusting knob features a positive stop at both maximum and minimum settings, which means that zero setting is not possible.



Single-point lubricator, DOS

Model	Connection thread BSP in	Air flow l/s min	Air flow l/s max[a]	Working pressure bar min	Working pressure bar max	Temperature range °C min	Temperature range °C max	Ordering No.
DOS 15B-C[b]	1/2	2.3	45	3.2	10	–30°	+60°	8202 4201 73
DOS 15B-CR[c]	1/2	2.3	45	3.2	10	–30°	+60°	8202 4202 72
DOS 20B-C[b]	3/4	2.3	53	3.2	10	–30°	+60°	8202 4201 81
DOS 20B-CR[c]	3/4	2.3	53	3.2	10	–30°	+60°	8202 4202 80

[a] At 6 bar and DP = 0.2 bar.

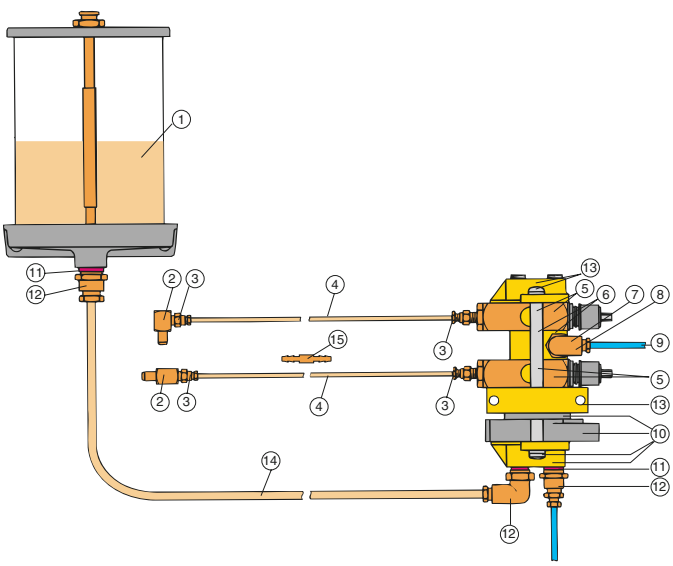
[b] With counter and 7.5 m oil-filled nylon tubing.

[c] With 0.3 l oil container counter and 7.5 m oil-filled nylon tubing.

Optional Accessories

FOR SINGLE POINT LUBRICATOR DOSOL

Designation	Ordering No.
Nylon tubing 3.2 mm outside diameter	
7.5 m, oil-filled	9090 1418 00
7.5 m, without oil	9090 1419 00
100 m, with oil	9090 1420 00
Barbed nipple for joining of 3.2 mm tubes	9090 1423 00
Check valve for outer end of nylon tubing, dia ext. 3.2 mm	9090 2050 00



FOR MULTI POINT LUBRICATOR DOSOL

Multiple-point lubricator, BASE, JECT 01

Designation			BSP in	Ordering No.
BASE baseplate	Plate			8202 4205 04
		Oil port	1/4	
		Air port	1/4	
	Clamp			
		Oil port	1/4	
		Air port	1/4	
JECT 01 oil pump	Oil delivery port		1/8	8202 4203 10

TEN-counter
When lubricating equipment with a very low air consumption or very short time in operation it may be difficult to set a sufficiently small dose of oil. In such cases a counter is connected underneath the base plate BASE. The oil pumps will then be actuated only on each, every fifth or every tenth air pulse. The air signal is connected to the clamp underneath the counter.
Ordering No. 8202 4206 03

Side-ported air block kit
If all pumps are not to be actuated simultaneously, a signal block is installed between the oil pumps in the stack. The pumps below the signal block will then be actuated via the base plate BASE and those above it from a separate signal via the signal block.
Ordering No. 8202 4206 03

NOTE: When the counter TEN is used in MPL installations an intermediate, black plastic part is used (supplied with all TEN counters) between BASE and TEN.

Ref No. in figure	Designation	Ordering No.
1	Oil container	
	0.3 l for direct mounting	9090 1415 00
	0.95 l for wall mounting (1/4" BSP female)	9090 1416 00
	1.9 l for wall mounting (1/4" BSP female)	9090 1417 00
2	Check valve	
	1/8" BSPT 90° elbow male x 1/8" BSP female	9090 1427 00
	1/8" BSPT, straight male x 1/8" BSP female	9090 1426 00
3	Male adapter 1/8" BSPT, straight for tube outer diameter 3.2 mm	9090 1425 00
4	Capillary tubing	
	7.5 m, outer dia. 3.2 mm prefilled with oil	9090 1418 00
	7.5 m, outer dia. 3.2 mm without oil	9090 1419 00
	100 m, outer dia. 3.2 mm with oil	9090 1420 00
5	JECT 01 kit[a]	8202 4203 10
6	Side-ported air block kit	9090 1424 00
7	Fiber packing for 1/8" BSP	0657 5742 00
8	Male adapter 1/8" BSP, straight for tube outer diameter 5 mm	9090 0714 00
9	Nylon tube outer diameter 5 mm (sold by the meter)	9030 0059 00
10	Counter TEN kit	8202 4206 03
11	Fiber packing for 1/4" BSP	0657 5764 00
12	Male adapter 1/4" BSP, straight for tube outer diameter 8 mm	9090 0715 00
13	BASE kit	8202 4205 04
14	Nylon tube, outer diameter 8 mm (sold by the meter)	9030 0060 00
15	Barbed nipple for joining of nylon tubes outer diameter 3.2 mm	9090 1423 00

[a] With high temperature Viton seals 8202 4203 15.