

## 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

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. EP-versions are adjusted for use with impulse tools.



### WORKING TEMPERATURE

-40°C to +60°C at 10 bar  
+2°C to +60°C 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  
Outlet pressure, HP versions 0.5-16 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 <sup>3</sup>	Max oil capacity cm <sup>3</sup>	Weight kg	Ordering No.
<b>Filters</b>								
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
<b>Regulators</b>								
MIDI Optimizer REG	-	97	-	-	-	-	0.35	9093 0021 05
MIDI Optimizer REG LP	-	97	-	-	-	-	0.35	9093 0021 06
MIDI Optimizer REG HP	-	97	-	-	-	-	0.35	9093 0021 30
<b>Lubricators</b>								
MIDI Optimizer DIM	31	120	Polymer, plastic insert	-	-	90	0.3	9093 0021 10
MIDI Optimizer DIM EP	31	120	Polymer, plastic insert	-	-	90	0.3	9093 0021 33
<b>Filter/regulator</b>								
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
MIDI Optimizer F/R M/S HP	-	90	Polymer, plastic insert	Manual/semi auto	60	-	0.5	9093 0021 31
MIDI Optimizer F/R HP A	-	90	Polymer, plastic insert	Automatic	60	-	0.5	9093 0021 32
<b>Filter/regulator+lubricator</b>								
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
MIDI Optimizer F/RD A EP	31	55	Polymer, plastic insert	Automatic	60	90	1.0	9093 0021 35
MIDI Optimizer F/RD M/S EP	31	55	Polymer, plastic insert	Manual/semi auto	60	90	1.0	9093 0021 36
<b>Filter+regulator+lubricator</b>								
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.

EP For pulse tools, lubricator adjusted for impulsing tools  
A Automatic  
M/S Manual/semi automatic  
HP High pressure regulator  
LP Lockable regulator

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 3/4" 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

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1/4" BSP  
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<b>Filters</b>								
MIDI Optimizer 3/4" FIL A	-	117	Polymer, plastic insert	Automatic	60	-	0.3	9093 0021 40
MIDI Optimizer 3/4" FIL M/S	-	117	Polymer, plastic insert	Manual/semi auto	60	-	0.3	9093 0021 41
<b>Regulators</b>								
MIDI Optimizer 3/4" REG	-	97	-	-	-	-	0.35	9093 0021 42
MIDI Optimizer 3/4" REG LP	-	97	-	-	-	-	0.35	9093 0021 43
MIDI Optimizer 3/4" REG HP	-	97	-	-	-	-	0.35	9093 0021 44
<b>Lubricators</b>								
MIDI Optimizer 3/4" DIM	31	120	Polymer, plastic insert	-	-	90	0.3	9093 0021 45
MIDI Optimizer 3/4" DIM EP	31	120	Polymer, plastic insert	-	-	90	0.3	9093 0021 54
<b>Filter/regulator</b>								
MIDI Optimizer 3/4" F/R A	-	90	Polymer, plastic insert	Automatic	60	-	0.5	9093 0021 46
MIDI Optimizer 3/4" F/R M/S	-	90	Polymer, plastic insert	Manual/semi auto	60	-	0.5	9093 0021 47
MIDI Optimizer 3/4" F/R M/S HP	-	90	Polymer, plastic insert	Manual/semi auto	60	-	0.5	9093 0021 48
MIDI Optimizer F/R 3/4" HP A	-	90	Polymer, plastic insert	Automatic	60	-	0.5	9093 0021 49
<b>Filter/regulator+lubricator</b>								
MIDI Optimizer 3/4" F/RD A	31	55	Polymer, plastic insert	Automatic	60	90	1.0	9093 0021 50
MIDI Optimizer 3/4" F/RD A EP	31	55	Polymer, plastic insert	Automatic	60	90	1.0	9093 0021 55
MIDI Optimizer 3/4" F/RD M/S	31	55	Polymer, plastic insert	Manual/semi auto	60	90	1.0	9093 0021 56
MIDI Optimizer 3/4" F/RD M/S EP	31	55	Polymer, plastic insert	Manual/semi auto	60	90	1.0	9093 0021 51

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

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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.

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HP High pressure regulator  
LP Lockable regulator

## Optional Accessories

### COMMON ACCESSORIES

Designation	Ordering No.			
	MINI-K	MINI-B	MIDI OPTIMIZER	MAXI-B
<b>Mounting bracket kit</b>	9090 1902 00	9092 0063 01	9093 0022 01	9093 0076 15
<b>Assembly kit</b>	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
<b>Filter element</b>				
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
<b>Bowl guard</b>		9092 0063 91		

### REGULATOR (REG) ACCESSORIES

Designation	Ordering No.			
	MINI-K	MINI-B	MIDI OPTIMIZER	MAXI-B
<b>Pressure gauge</b>				
0-10 bar				
Ø 40 mm	9090 1907 00	9090 1907 00		
Ø 50 mm		9090 1172 00	9090 2052 00	
Metal housing			9090 2052 01	
0-16 bar				
Ø 49 mm			9090 0239 00	9090 0239 00
Ø 50 mm		9090 1657 00		
<b>Panel mounting pressure gauge</b>				
0-10 bar				
Ø 50 mm		9090 1173 00	9090 1173 00	
<b>Key lock for regulator -LP</b>		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.

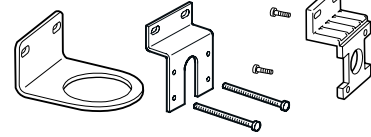
### LUBRICATOR (DIM) ACCESSORIES

Designation	Ordering No.				
	MINI-K	MINI-B	MIDI Optimizer		MAXI-B
			MIDI 1/2"	MIDI 3/4"	
<b>Air distribution block kit</b>	9090 1900 90	9092 0064 51	9093 0022 03	9093 0022 04	9093 0076 41
<b>Bowl guard</b>		9092 0063 91			
<b>Glass sight dome</b>		9090 1121 00			

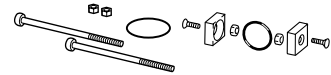
### FRL STAND

Designation	Ordering No.
FRL-Stand - suits all models	9090 2101 00
FRL-Stand kit	9090 3030 02
FRL-Stand MAXI BSP	9090 3030 04
FRL-Stand MIDI BSP	9090 3030 06

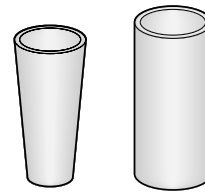
Mounting bracket kit



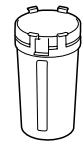
Assembly kit



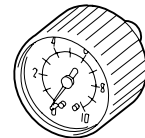
Filter element



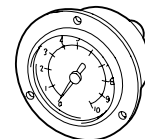
Bowl guard



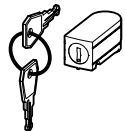
Pressure gauge



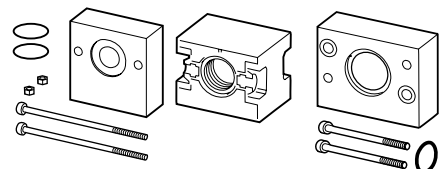
Panel mounting pressure gauge



Key locks for regulator -LP



Air distribution block kit



Glas sight dome



FRL stand

