

Air preparation units



Get the most out of your tools

- Get maximum productivity from your tools
- Extend the tool lifetime
- Lubricate your air tools
- Range covers all pneumatic tool needs



Selection guide

Mini	Midi	Maxi
		
0-9 l/s	9-31 l/s	31-82 l/s

Air Preparation Units

Air Preparation Units



MINI K

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**
0°C to +50°C 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. The MINI K F/RD unit is delivered complete with mounting bracket, assembly kit and pressure gauge.



MINI B

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 zinc.

- **Working temperature**
0°C to +50°C 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.

Air Preparation Units



The **MIDI Optimizer** is a self-regulating nanolubricator that automatically adjusts to the flow demand and ensures that the right amount of oil is supplied to the motor at all flow rates.

It is suitable for more than 90% of the Atlas Copco tool range. The unit 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.

- **Working temperature**
-40°C to +60°C at 10 bar
+2°C to +60°C at 10 bar for filters
- **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

MIDI Optimizer - 1/2"

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
MIDI Optimizer REG HP	-	97	-	-	-	-	0.35	9093 0021 30
Lubricators								
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
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
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
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
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
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.

EP For impact and pulse tools
A Automatic
M/S Manual/semi automatic
HP High pressure regulator
LP Lockable regulator

Air Preparation Units



The **MIDI Optimizer** is a self-regulating nanolubricator that automatically adjusts to the flow demand and ensures that the right amount of oil is supplied to the motor at all flow rates.

It is suitable for more than 90% of the Atlas Copco tool range. The unit 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.

- **Working temperature**
-40°C to +60°C at 10 bar
+2°C to +60°C at 10 bar for filters
- **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

MIDI Optimizer - 3/4"

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 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
Regulators								
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
Lubricators								
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
Filter/regulator								
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
Filter/regulator+lubricator								
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
Filter+regulator+lubricator								
MIDI Optimizer 3/4" FRD A	31	55	Polymer, plastic insert	Automatic	60	90	1.1	9093 0021 52
MIDI Optimizer 3/4" FRD M/S	31	55	Polymer, plastic insert	Manual/semi auto	60	90	1.1	9093 0021 53

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 impact and pulse tools
A Automatic
M/S Manual/semi automatic
HP High pressure regulator
LP Lockable regulator



MAXI B - 1"

The main application of this high flow air preparation unit is to prepare the air for pneumatic tools which are large air consumers and when long distribution hoses are being used. A good example is Atlas Copco turbine grinders. The **MAXI-B** has a diecast zinc housing and aluminum bowls with polypropylene inserts, and the unit has a 1" BSP connection thread. The bowl is mounted directly on the housing for easy handling.

- **Working temperature**
-10°C to +50°C 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 MINI F/RD and FRD units are delivered complete with mounting bracket, assembly kit and pressure gauge.

Model	MINI-K	MINI-B	MIDI OPTIMIZER 1/2"	MIDI OPTIMIZER 3/4"	MAXI-B
Mounting bracket kit ^a	9090 1902 00	9092 0063 01	9093 0022 01	9093 0022 01	9093 0076 15
Assembly kit ^a	9090 1901 90	9092 0062 71	9093 0022 02	9093 0022 02	9093 0076 31
Filter (FIL) accessories (30 µm filter element is incl with all filters)					
30 µm filter element	9090 1898 00	9092 0063 31	9093 0023 04	9093 0023 04	9093 0076 61
5 µm filter element		9092 0063 61	9093 0023 05	9093 0023 05	9093 0076 71
Bowl guard		9092 0063 91			
Regulator (REG) accessories ^b					
Pressure gauge, 0-10 bar, Ø 40 mm	9090 1907 00	9090 1907 00			
Pressure gauge, 0-10 bar, Ø 50 mm		9090 1172 00	9090 2052 00	9090 2052 00	
Pressure gauge, 0-10 bar, Metal housing			9090 2052 01	9090 2052 01	
Pressure gauge, 0-16 bar, Ø 49 mm			9090 0239 00	9090 0239 00	9090 0239 00
Pressure gauge, 0-16 bar, Ø 50 mm		9090 1657 00			
Panel mounting pressure gauge, 0-10 bar, Ø 50 mm		9090 1173 00	9090 1173 00	9090 1173 00	
Panel mounting pressure gauge, 0-16 bar, Ø 63 mm					9093 0076 43
Key lock for regulator -LP		9092 0074 11	9092 0074 11	9092 0074 11	9092 0074 11
Lubricator (DIM) accessories					
Air distribution block kit	9090 1900 90	9092 0064 51	9093 0022 03	9093 0022 04	9093 0076 41
Bowl guard		9092 0063 91			
Glass sight dome		9090 1121 00			
Oil reduction plate			9093 0022 06	9093 0022 06	

^a Are included in combination units (FD, FTD, F/RD and FRD). Mounting bracket kits and assembly kits have to be ordered separately for separate units.

^b 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.

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. Safety data sheets (MSDS/SDS) available online.

- **Temperature range**
-25°C to +70°C
- **Density at 15°C**
869 kg/m³
- **Viscosity at 40°C**
22 mm²/s
- **Pour point**
-48°C
- **Flash point COC**
>170°C

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

FRL-stand

Model	Ordering No.
FRL-Stand - suits all models	9090 2101 00
FRL-Stand kit ^c	9090 3030 02

^c For impact wrenches and pulse tools up to 1/2" BSP air inlet and 32 l/s air flow requirements.

Includes: Metal stand, large metal gauge up to 10 bar, ErgoQIC 10 coupling, 0.5 liter of optimizer oil, Turbo 13 hose with length 5 meters. The FRL-stand has BSP connection.



FRL-Stand - suits all models



FRL-stand kit



Optimizer - Air Tool Oil

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.

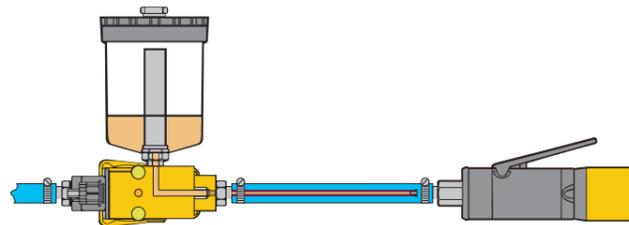
- **Exact amount** – Precision injector, adjustable for exact amount of oil.
- **Oil directly at the tool** – The oil is conveyed through a capillary tube directly to the lubrication point.

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 mm³). 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 mm³). 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.

Model	Connection thread BSP in	Air flow l/s		Working pressure bar		Temperature range °C		Ordering No.
		min	max ^a	min	max	min	max	
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.

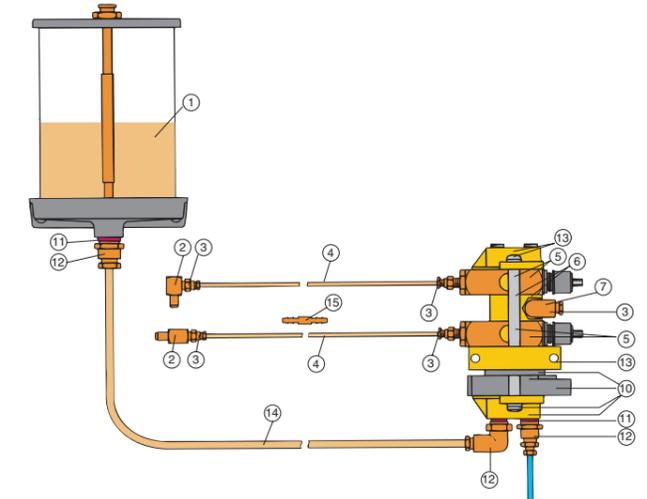
^b With counter and 7.5 m oil-filled nylon tubing.

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

Single-point lubricator, DOS

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



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.

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 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

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
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
16	Nylon tube outer diameter 5 mm (sold by the meter)	9030 0059 00

^a With high temperature Viton seals 8202 4203 15.