



CONNECTED TO INNOVATION







Filtration, regulation and lubrication of compressed air

## Optimise the efficiency of actuators and pneumatic tools

The extensive **Prevost Filtration** range provides professional level equipment for treating compressed air and pneumatic systems.

Our solutions guarantee clean air throughout the network which will optimise air flow and extend the service life of your entire system.

An efficient air system is the basis of quality production.

### **APPLICATIONS**

- The **Prevost Filtration** range can be used for numerous industrial applications.
- Air tool supply
- 1 Pneumatic automation
- Pneumatic tools
- Blowing
- (+) Inflation

### **COMPLIANCE**

- The **Prevost Filtration** range complies to the strictest industrial standards.
  - Pressure Equipment Directive 2014/68/EU
  - REACH regulation
  - ATEX: Compatible with class 1 and 2 (gas) and 21 and 22 (dust) ATEX zones







### TECHNICAL SPECIFICATIONS

① Operating pressure range: 0.8 - 12 bar

Temperature range: +5°C to 50°C

### **COUPLING**

■ **Prevost Filtration** is available in a variety of thread sizes in accordance with NF EN ISO 228-1 standards.



⊕ G1/8 - G1/4 - G3/8 - G1/2: wide flexibility of configuration for each pneumatic system

### MATERIAL COMPOSITION

- Body: Aluminium
- Tank: Polycarbonate
- Protections: Polyamide

### Filtration for pure air

Filtering with mechanical separation removes solid particles (dust, shavings,...) and liquids (water or oil) from compressed air systems. This process will clean air and protect pneumatic equipment.





### PREVOST, CERTIFIED FILTRATION

■ The ISO 8573-1 standard specifies the air purity classes for a pneumatic system.



	SOL	ID PARTICLES		WATER	OIL
ISO 8573-1 Class	Maximum nu	mber of particles	s per m³	Dew point	Total concentration
	0.1 - 0.5 μm	0.5 - 1 μm	1 - 5 μm	under vapour pressure	of oil (liquid, aerosol + gas)
0	Д	AS SPECIFIED AN	ID STRICTE	ER THAN CLASS	1
1	≤ 20.000	≤ 400	≤ 10	≤ -70°C	≤ 0.01 mg/m³
2	≤ 400.000	≤ 6.000	≤ 100	≤ <b>-40°C</b>	≤ <b>0.1 mg/m</b> <sup>3</sup>
3		≤ 90.000	≤ 1.000	≤ -20°C	≤ 1 mg/m³
4			≤ 10.000	≤ +3°C	≤ 5 mg/m³
5			≤ 100.000	≤ +7°C	
6		< Cp ≤ 5 mg/m³		≤ +10°C	
7		Cp ≤ 10 mg/m³		≤ 0.5 g/m³	
8				0.5 - 5 g/m³	
9				5 - 10 g/m³	
x	c	p > 10 mg/m³		> 10 mg/m³	> 10 mg/m³





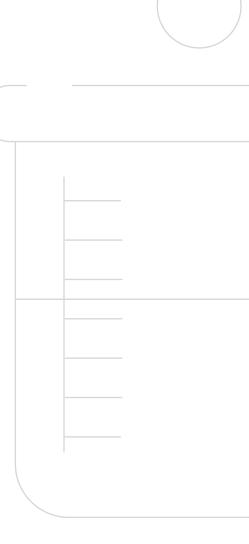
### Examples of compressed-air classifications

_		Particles	Water	Oil
plication	Industry	7	4	4
pplic	Food/Beverage	1	4	1
∢	Painting	1	4	1

### The sources of pollution in an air network

- Installation debris
- Materials originating from compressor deterioration
- Contaminants, dust and humidity consumed by the compressor

Loose particles are capable of damaging components or compromising seals which will ultimately effect the operation of a pneumatic system.



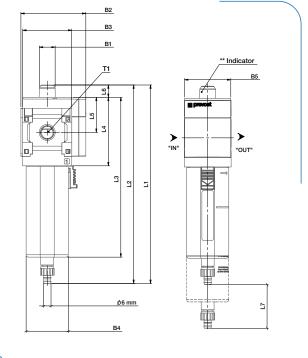


### FILTERS: CLASS 5-8-4 FOR 25 µm

■ The high tech design of **Prevost Filtration** filters block and removes solid and liquid particles up to **1 µm**.



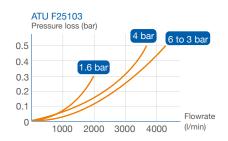
- ① Sintered bronze cartridge
- Remove condensates via the manual drain at the bottom of the tank.



Thread	G 1/8	G 1/4	G 3/8	G 1/2		
Flowrate @ 6.3 bar and $\Delta p = 0.3$ bar	700 l/min	950 l/min	2200 l/min	3300 l/min		
Filtration (µm)		1-5 or	25* μm			
Maximum service pressure		10	bar			
Service temperature		+5 °C t	o 50°C			
Recipient capacity	17	ml	50	ml		
Weight	0.19	9 kg	0.65 kg			

 $<sup>^{\</sup>ast}$  1 and 5  $\mu m$  filters are available as spare parts.





Module	T1	L1	L2	L3	L4	L5	L6	L7	В1	B2	В3	B4	В5
ATU F25100	G 1/8	169.5	159	137	58.5	30	10.5	25	Ø13.5	55.5	42	SQ36	40
ATU F25101	G 1/4	169.5	159	137	58.5	30	10.5	25	Ø13.5	55.5	42	SQ36	40
ATU F25102	G 3/8	235	217	196	89.5	45.5	18	30	Ø22	77.5	62	SQ56	62
ATU F25103	G 1/2	235	217	196	89.5	45.5	18	30	Ø22	77.5	62	SQ56	62

### ADVANTAGES OF **PREVOST FILTRATION**

### ■ Clog indicator

⊕ Indicator alerts when the cartridge is full or needs to be replaced. Pressure loss will occur when the filter cartridge is saturated.



### ■ Manual Drain

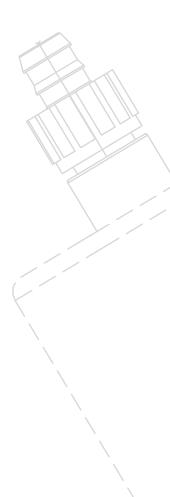
The drain is equipped with a barb-style outlet where a hose can be installed to transport condensates to a treatment unit.



### ■ Tank with "bayonet"-type locking

① Quickly replace a filter cartridge or lubricator tank with this style of locking system.





### Regulating pressure,

### an essential function

Controlling the supply pressure of a compressed air network will avoid deterioration of a pneumatic system's components. Set the pressure for specific machinery or tools to optimize functionality and reduce excess energy consumption.





### **Protect pneumatic components**

Your network's compressed air may be distributed with flow and pressure variations.

- 1 High risk of deterioration of fragile pneumatic components
- > Air must be supplied at a constant pressure.

### **Protect** your production

When designing a pneumatic system, each cylinder is dimensioned according to precise specifications.

- ① If the supply pressure is set high, the cylinder will produce a force that is too great.
- > Damage to production goods
- > Expose operators to dangerous conditions
- ① If the supply pressure is too low, cylinder operation is not optimal.
- > Reduced productivity will occur
- ① On industrial robots, the force generated by the pressure of the compressed air guarantees constant and precise clamping force on pneumatic grips.

### **Guarantee optimised blowing and suction**

- Regulated compressed air is essential for operators.
- ① Cleaning parts and workstations
- Maintain constant suction during part handling





1 LOCKABLE REGULATOR

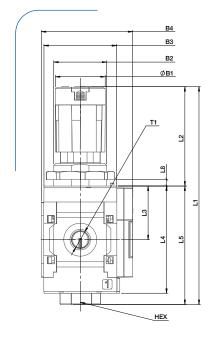
1 INTEGRATED PRESSURE GAUGE

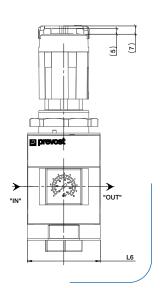
### **REGULATORS**

■ **Prevost Filtration** regulators allow precise pressure control over each application.

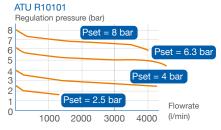


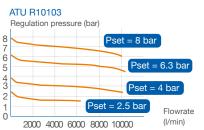
- ① Constant outlet pressure
- ① Eliminate over pressure and under pressure risks
- Eliminate excess energy consumption





Thread	G 1/8	G 1/4	G 3/8	G 1/2					
Flowrate @ inlet pressure = 10 bar, Outlet pressure = 6.3 bar and ∆p = 1 bar	750 I/min	1500 l/min	4300 l/min	4700 l/min					
Inlet pressure	0.8 to 15 bar								
Outlet pressure		0.5 to	10 bar						
Service temperature		+5 °C to	o 50°C						
Weight	0.7	kg							





Module	T1	HEX	L1	L2	L3	L4	L5	L6	L8	ØB1	B2	В3	B4
ATU R10100	G 1/8	19	121.5	56	30	60	65.5	40	4.5	28	M30x1.5	42	58
ATU R10101	G 1/4	19	121.5	56	30	60	65.5	40	4.5	28	M30x1.5	42	58
ATU R10102	G 3/8	30	185	84	45.5	91	100.5	62	7	42.5	M45x1.5	62	77.5
ATU R10103	G 1/2	30	185	84	45.5	91	100.5	62	7	42.5	M45x1.5	62	77.5

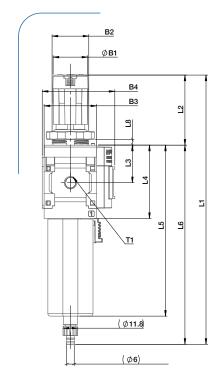


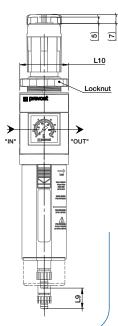
### **REGULATOR-FILTERS**

■ **Prevost Filtration** regulator-filters combine the filtration and regulation functions.



- A single compact unit
- ① Use for non-lubricated applications





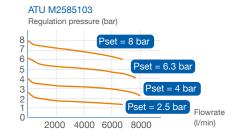
ATU M2585101

- LOCKABLE REGULATOR
- HINTEGRATED PRESSURE GAUGE
- BARB-TYPE OUTLET

Thread	G 1/8	G 1/4	G 3/8	G 1/2							
Flowrate @ inlet pressure = 10 bar, Outlet pressure = 6.3 bar and ∆p = 1 bar	700 l/min	1000 l/min	3000 l/min	4500 l/min							
Filtration (µm)		1-5 or	25* µm								
Inlet pressure	0.8 to 10 bar										
Outlet pressure		0.5 to	8.5 bar								
Service temperature		+5 °C t	o 50 °C								
Recipient capacity	17 ml 50 ml										
Weight	0.3	kg	0.9 kg								

 $<sup>^{\</sup>star}$  1 and 5  $\mu m$  filters are available as spare parts.

### 



Module	T1	L1	L2	L3	L4	L5	L6	L8	L9	L10	ØB1	В2	ВЗ	В4
ATU M2585100	G 1/8	215	56	30	58.5	137	159	4.5	25	40	28	M30x1.5	42	58
ATU M2585101	G 1/4	215	56	30	58.5	137	159	4.5	25	40	28	M30x1.5	42	58
ATU M2585102	G 3/8	302	84	45.5	89.5	196	217	7	30	62	42.5	M45x1.5	62	77.5
ATU M2585103	G 1/2	302	84	45.5	89.5	196	217	7	30	62	42.5	M45x1.5	62	77.5

### ■ Lockable regulator

- Secure regulator settings
- Protect pneumatic acuators



### ■ Integrated pressure gauge

- ① Compact assembly
- ① No external components to be mounted
- (+) Ideal for equipping a pneumatic cabinet



### **Lubrication** guarantees the reliability of the pneumatic components

Lubricating pneumatic tools will multiply their service life by 5 and significantly reduce maintenance costs.





### THE ADVANTAGES OF PREVOST FILTRATION LUBRICATION

- Reduce friction between moving parts
- Prevent seizing
- Protect against corrosion
- Adsorbs and evacuates heat
- > Increase the efficiency and service life of pneumatic tools

① To maximize effectiveness, the air hose between the lubricator and pneumatic tool should not exceed 10 meters.



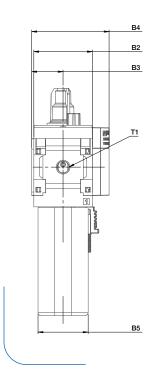


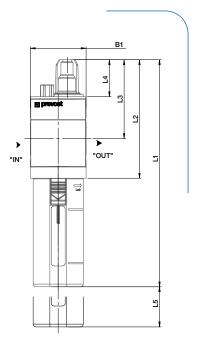
### **LUBRICATORS**

■ Prevost Filtration oil-mist lubricators inject a dose of lubricant into the filtered air.



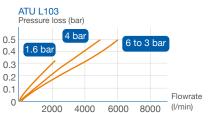
- + Fine adjustment using dial
- Rigorous adjustment by needle screw
- Possibility to fill the oil tank while under pressure
- ① Recommended oil: ISO VG32 (Ref. LUB 3256)





Thread	G 1/8	G 1/4	G 3/8	G 1/2					
Flowrate @ 6.3 bar and $\Delta p = 0.3$ bar	600 l/min	950 l/min	2400 l/min	4000 l/min					
Minimum service flowrate	40 l	/min	75 l	/min					
Maximum service pressure	10 bar								
Service temperature		+5 °C to	to 50 °C						
Recipient capacity	30	ml	65 ml						
Weight	0.19	9 kg	0.60 kg						





Module	T1	L1	L2	L3	L4	L5	B1	B2	В3	B4	B5
ATU L100	G 1/8	163	85	56.5	26.5	35	40	42	22.5	55.5	SQ36
ATU L101	G 1/4	163	85	56.5	26.5	35	40	42	22.5	55.5	SQ36
ATU L102	G 3/8	221	114.5	70.5	25	50	62	62	33	77.5	SQ56
ATU L103	G 1/2	221	114.5	70.5	25	50	62	62	33	77.5	SQ56

### **Additional accessories**

### for filtration line

The Prevost Filtration range includes additional equipment to control compressed air distribution.



### **PREVOST FILTRATION SECURITY OPTIONS**

### ■ Lockable valve

- Secure opening and closing
- Protect the network during maintenance



### ■ Threaded exhaust

The following accessories can be installed on the threaded exhaust located under the valve:

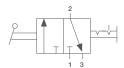
- A silencer
- A cap to avoid downstream depressurisation
- Noise reducer



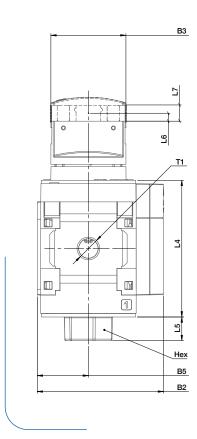
# prevost ATU V101 Pressure max.: 12 bar / 170 psi

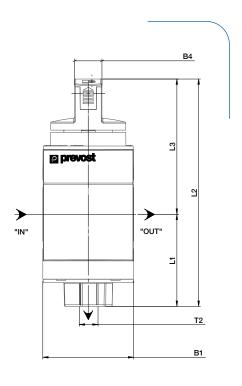
- 1 LOCKABLE VALVE
- THREADED EXHAUST

### MANUAL SHUT-OFF VALVE TYPE 3/2 NC



- ① Open and close the compressed air circuit
- ① Compressed-air purge downstream of the valve





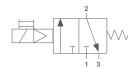
Thread	Air flowrate	G 1/8	G 1/4	G 3/8	G 1/2				
Flowrate @ 6 bar	1 => 2	1500 l/min	3000 l/min	6400 l/min	9000 I/min				
and ∆p = 1 bar	2 => 3	1300 l/min	1500 l/min	3100 l/min	3800 I/min				
Maximum service pressure		12 bar							
Service temperature		+5 °C to 50 °C							
Weight		0.18	3 kg	0.55 kg					

Module	T1	T2	HEX	L1	L2	L3	L4	L5	L6	L7	B1	B2	В3	В4	В5
ATU V100	G 1/8	G 1/4	19	41	100	59.5	60	11	7	10.5	40	55.5	Ø33	12	22.5
ATU V101	G 1/4	G 1/4	19	41	100	59.5	60	11	7	10.5	40	55.5	Ø33	12	22.5
ATU V102	G 3/8	G 1/2	30	60	152	92	91	14.5	8	13.5	62	77.5	Ø51	16	33
ATU V103	G 1/2	G 1/2	30	60	152	92	91	14.5	8	13.5	62	77.5	Ø51	16	33

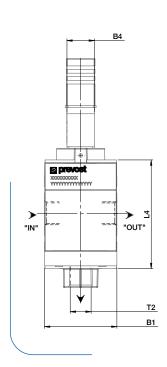
# prevost ATU E101 Pressure: 2-10 bar / 30-145 psl

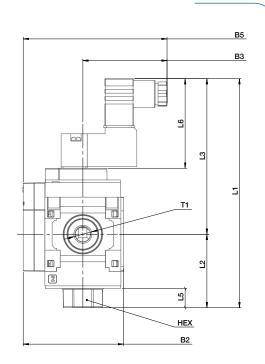
### THREADED EXHAUST

### **SOLENOID SHUT-OFF VALVE** TYPE 3/2 NC



- ① Open and close the compressed air circuit
- ① Compressed air purge downstream of the valve
- ① Use a remote or program with a controller to electronically open and close the valve.





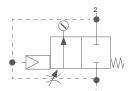
Thread	Air flowrate	G 1/8	G 1/4	G 3/8	G 1/2			
Flowrate @ 6 bar	1 => 2	1500 l/min	3000 l/min	6400 I/min	9000 I/min			
and $\Delta p = 1$ bar	2 => 3	1300 l/min	1500 l/min	3100 l/min	3800 l/min			
Service pressure	2 to 10 bar							
Service temperature	+5 °C to 50 °C							
Coil width	15 mm							
Voltage +/- 10%			24\	DC				
Power			2.5	5 W				
Protection rating			IP	40				
Insulation class		Class F						
Weight		0.23 kg 0.55 kg						

Module	T1	T2	HEX	L1	L2	L3	L4	L5	L6	В1	B2	В3	В4	В5
ATU E100	G 1/8	G 1/4	19	127	41	86	60	11	49.5	40	55.5	47	15.5	80
ATU E101	G 1/4	G 1/4	19	127	41	86	60	11	49.5	40	55.5	47	15.5	80
ATU E102	G 3/8	G 1/2	30	163	60	103	91	14.5	49.5	62	77.5	43	15.5	87.5
ATU E103	G 1/2	G 1/2	30	163	60	103	91	14.5	49.5	62	77.5	43	15.5	87.5

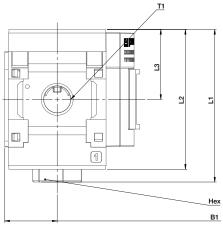


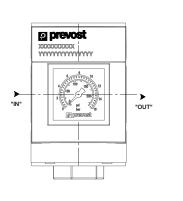
### **PROGRESSIVE PRESSURISATION VALVE TYPE 2/2 NC**

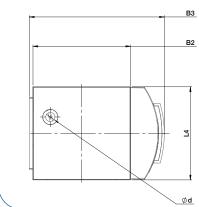
■ The **Prevost Filtration** pressuristion module gradually releases air into the network. When the outlet pressure reaches 55% to 75% of the inlet pressure, the valve opens completely and the full flowrate is attained.



- Adjust the pressurisation time with a dial
- ① No sudden or dangerous movements of the cylinders
- Protect pneumatic systems and operators

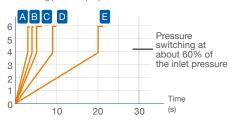






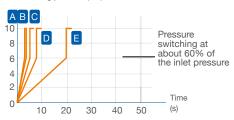
### SUPPLY PRESSURE 6 BAR

Switching pressure (bar)



### SUPPLY PRESSURE 10 BAR

Switching pressure (bar)



### ■ Number of revolutions

A = 5 revolutions

B = 4 revolutions

C = 3 revolutions

D = 2 revolutions

E = 1 revolutions

Thread	G 1/8	G 1/4	G 3/8	G 1/2			
Flowrate @ 6.3 bar and $\Delta p = 1$ bar	1400 l/min	2500 l/min	5300 l/min	6400 l/min			
Service pressure	4 to 10 bar						
Service temperature		+5 °C t	o 50°C				
Weight	0.15 kg 0.55 kg						

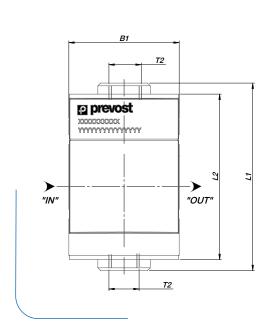
Module	w	HEX	L1	L2	L3	L4	B1	B2	В3	Ød1
ATU S100	G 1/8	19	65.5	60	30	40	22.5	42	55.5	4
ATU S101	G 1/4	19	65.5	60	30	40	22.5	42	55.5	4
ATU S102	G 3/8	30	100.5	91	45.5	62	32	62	77.5	5
ATU S103	G 1/2	30	100.5	91	45.5	62	32	62	77.5	5

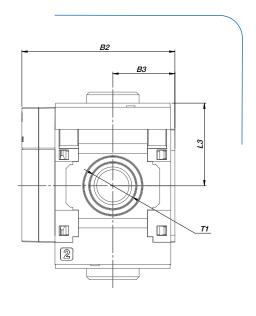


### **DISTRIBUTION UNITS**

■ The **Prevost Filtration** distribution units release air towards three different outlets in the filtration, regulation and lubrication chain.



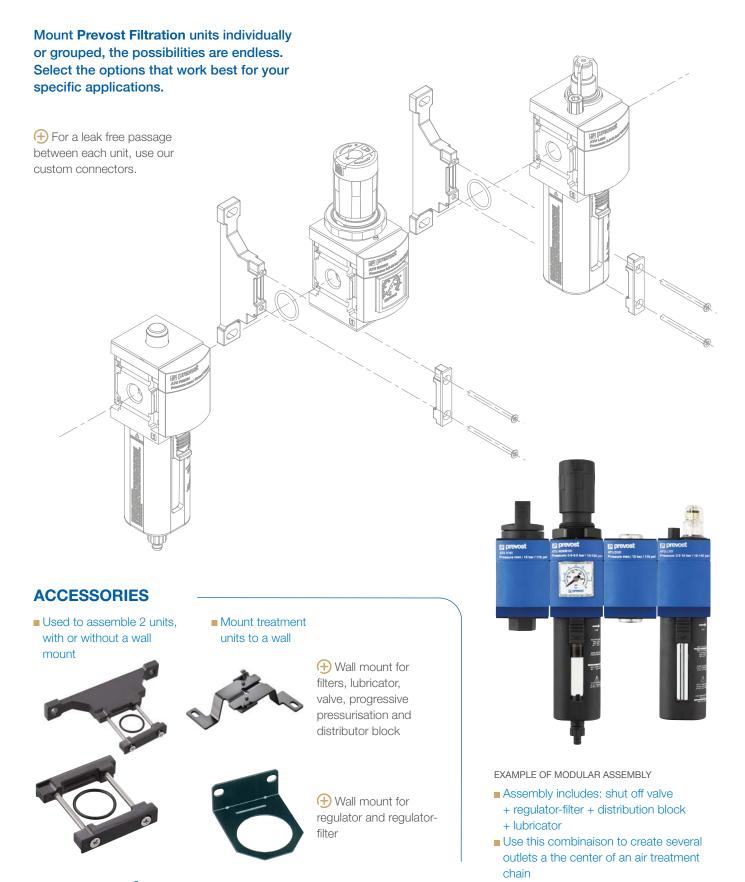




Thread	Air flowrate	G 1/8	G 1/4	G 3/8	G 1/2				
Flowrate @ 6 bar and ∆p = 1 bar	1 => 2	1900 l/min	5900 l/min	7500 l/min	17000 l/min				
	1 => 3 1 => 4	1500 l/min	4200 l/min	6800 l/min	12000 l/min				
Maximum service pressure		12 bar							
Service temperature		+5 °C to 50 °C							
Weight		0.12 kg 0.5 kg							

Module	T1	T2	L1	L2	L3	B1	B2	В3
ATU D100	G 1/8	G 1/8	68	60	30	40	55.5	22.5
ATU D101	G 1/4	G 1/4	68	60	30	40	55.5	22.5
ATU D102	G 3/8	G 3/8	101	91	45.5	62	77.5	33
ATU D103	G 1/2	G 1/2	101	91	45.5	62	77.5	33

### Prevost Filtration: a modular range



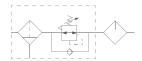
### Integrated, tailored solutions

**Prevost Filtration** compact solutions create a complete and efficient compressed air chain to ensure the reliability of your pneumatic network.

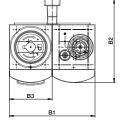


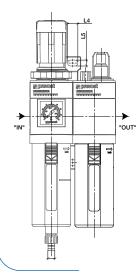
### **REGULATOR-FILTER, LUBRICATOR 2 UNITS**

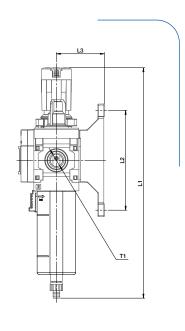
### ■ Prevost Filtration compact solution



- The regulator-filter guarantees clean air and constant outlet pressure
- The lubricator extends the service life of pneumatic tools
- Suited for supplying pneumatic tools
- The oil tank can be filled during use

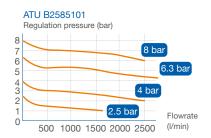


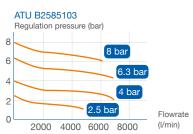




- **+** LOCKABLE REGULATOR
- 1 INTEGRATED PRESSURE GAUGE
- BARB-TYPE OUTLET

Thread	G 1/8	G 1/4	G 3/8	G 1/2					
Flowrate @ inlet pressure = 10 bar, outlet pressure = 6.3 bar and $\Delta p$ = 1 bar	400 l/min	700 I/min	2000 I/min	3300 l/min					
Filtration	1 - 5 and 25* μm								
Minimum service flowrate	40 l/min 75 l/min								
Inlet pressure	0.8 to 10 bar								
Outlet pressure	0.5 to 8.5 bar								
Service temperature		+5 °C t	o 50°C						
Recipient (Filter) capacity	17	ml	50 ml						
Recipient (Lubricator) capacity	30	ml	65 ml						
Weight	0.55	5 kg	1.6 kg						





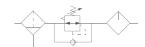
Module	T1	L1	L2	L3	L4	L5	B1	B2	В3
ATU B2585100	G 1/8	215	93	45	9.5	5.5	80	80	40
ATU B2585101	G 1/4	215	93	45	9.5	5.5	80	80	40
ATU B2585102	G 3/8	302	142	52.5	10	6.5	124	97	62
ATU B2585103	G 1/2	302	142	52.5	10	6.5	124	97	62

# Pressure max: 10 bar / 145 pal Pressure max: 10 bar / 145 pal Pressure: 0.5-10 bar / 10-145 pal

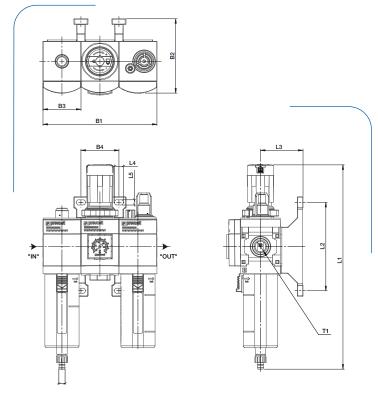
- CLOG INDICATOR
- 1 LOCKABLE REGULATOR
- 1 INTEGRATED PRESSURE GAUGE
- BARB-TYPE OUTLET

### FILTER, REGULATOR, LUBRICATOR 3 UNITS

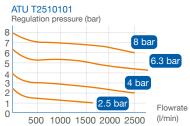
■ The compact **Prevost Filtration** 3 unit solution provides enhanced performance over the 2 unit assembly.

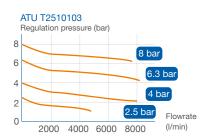


- Additional air flow
- Reduced pressure loss
- 1 Improved flow rates
- ① Optimised efficiency of pneumatic system
- ① Oil tank can be filled during use



Thread	G 1/8	G 1/4	G 3/8	G 1/2					
Flowrate @ inlet pressure = 10 bar, outlet pressure = 6.3 bar and ∆p = 1 bar	500 I/min	800 l/min	2200 l/min	3500 l/min					
Filtration	1 - 5 and 25* μm								
Minimum service flowrate	40 l/min 75 l/min								
Inlet pressure	0.8 to 10 bar								
Outlet pressure		0.5 to	10 bar						
Service temperature		+5 °C t	o 50°C						
Recipient (Filter) capacity	17	ml	50 ml						
Recipient (Lubricator) capacity	30	ml	65 ml						
Weight	0.69	9 kg	2.13 kg						





Module	T1	L1	L2	L3	L4	L5	B1	B2	В3	B4
ATU T2510100	G 1/8	215	93	45	9.5	5.5	120	80	40	40
ATU T2510101	G 1/4	215	93	45	9.5	5.5	120	80	40	40
ATU T2510102	G 3/8	302	142	52.5	10	6.5	186	97	62	62
ATU T2510103	G 1/2	302	142	52.5	10	6.5	186	97	62	62

### **Customized** configurations

Each air treatment assembly can be configured according to each specific application.



### Possible configuration for specialized machinery or machine-tool

shut-off valve

+ regulator-filter + progressive pressurisation valve assembly

(+) Ideal for non-lubricated equipment

- > The shut-off valve allows the compressed air to be shut off during maintenance.
- > Installation and operator safety.

The progressive pressurisation valve ensures proper machine restarting.

- > Smooth pressurisation
- > No risk of deterioration of the pneumatic cylinders.



### Configuration possible for supplying pneumatic tools

Shut-off valve

- + regulator-filter + distribution block
- + lubricator assembly
- (+) Ideal for supplying certain pneumatic tools.
- > The regulator-filter, lubricator provides high quality air.
- > Protects components
- > Quality production
- The shut-off valve allows the compressed air to be shut off during maintenance.
- > Installation and operator safety.
- The distribution block positioned in front of the lubricator has a non-lubricated air outlet for blowing or inflation applications.
- > Flexibility of compressed-air use.



### Air treatment

# Just one element in the Prevost range of compressed air products

Prevost manufactures a complete range of compressed air products to connect the outlet of a compressor to the supply of a workstation.

### INSTALL BEFORE PREVOST FILTRATION UNITS

■ Transport compressed air right up to the point of use with one of our innovative, reliable solutions.

### PREVOST PIPING SYSTEM compressed air network

- > The **PPS** 100% aluminium range comprises aluminium pipes and couplings that are compact, lightweight and robust.
- > The **PPS SQ** range allows the transport of compressed air directly to the assembly workstations.

### INSTALL AFTER PREVOST FILTRATION UNITS

- After air is filtered, regulated and lubricated we provide numerous options to distribute the air.
  - Compressed air hose extensions of 5 to 10 metres, equipped with **prevoS1** safety release quick couplings to supply pneumatic tools or blow guns
  - Ange of **CONEX** push-in fittings along with polyamide and polyurethane tubing, supplies the distributors and cylinders found in pneumatic automation.







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