SUBMICROFILTER

Dear Customer,

Thank you for your confidence in our product.
In the following pages you will find the technical data required for the trouble-free installation and maintenance of these pneumatic components. Please read and observe the instructions fully to ensure that the product will give you long, trouble-free service.

Warning: Servicing and repair work must only be carried out by a qualified technician.

1. TECHNICAL DATA

Characteristics			Pressures are gauge pressures	
Port size			G1/8	G1/4
Condensate drainage			standard: manual on request: semiautomatic with pressure relief	
Installation			vertical (bowl downwards)	
Medium and ambient temperature range	ϑ_{min} ϑ_{max}	°C °C	1,5 +50 ① (other temperatures on request)	
Weight (mass)		kg	0,1	
Pneumatic Characteristics				
Operating pressure range Inlet	p_{1min} p_{1max}	bar	0 10	
Recommended flow rate ②	Q_n	l/min m³/h	**125** **7,5**	**125** **7,5**
Pressure drop at recommended flow rate	∗p	bar	ca. 0,07 with new filter element up to ca. 0,3 in operation (saturated element)	
Filtration efficiency at recommended flow rate	–	%	over als 99,999%, based on solids >0,01µm (DOP or BS 3928, 2577)	

① at 10 bar
② at 6 bar

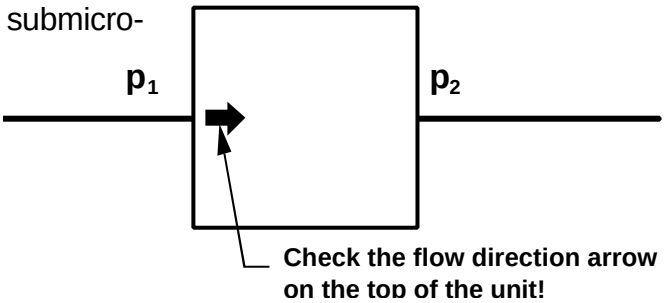
2. INSTALLATION INSTRUCTIONS

Warning: The unit must be used only in industrial applications for compressed air.
To avoid danger of injuries, the compressed air system must be fully depressurized while pneumatic components are being installed.

Note: A filter-water-separator with pore size 5µm (yellow) must always be installed before the submicrofilter (directly before it if possible).

The bowl must not come into contact with the following materials (whether in liquid or gaseous form):
acetone, benzene, brake fluid, chloroform, acetic acid, glycerine, methanol, carbon bisulphide, tri-, tetra- and per-compounds, toluene, xylene (cellulose thinners) and high flash-point synthetic oils (e.g. phosphoric ester base, etc.).
Incompatible materials can be carried over from the ambient air or from equipment upstream (e.g. oil from compressors). This can cause bursting of the bowl.
Check this possibility before installing the unit. If in doubt, please consult your sales contact.

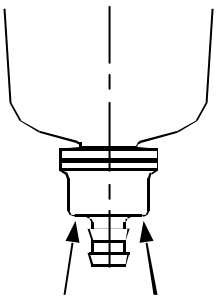
1. Clean out the air line carefully, removing any loose rust or other deposits.
2. Connect the air line to the submicrofilter (check flow direction!)
3. Turn on the compressed air supply.



3. MAINTENANCE

3.1. Manual Drainage

To drain condensate from the bowl, press the plastic part upwards against the bowl ⇒ this opens the valve.
The condensate level should never be above the “Maximum” mark on the bowl.



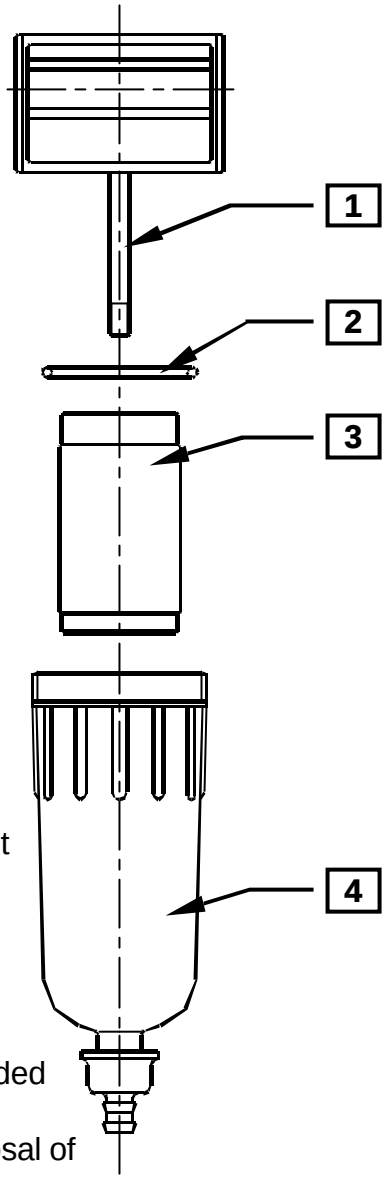
3.2. Cleaning

As soon as serious pressure drop is observed, replace the filter element.
The filter element cannot be washed out and must always be replaced.
The bowl and other plastic parts should only be cleaned with warm water and normal washing-up liquid.

4. DISMANTLING

Warning: To avoid danger of injuries, the unit must only be dismantled with the pneumatic system completely de-pressurized!

1. Unscrew bowl ④.
2. Screw filter insert ③ off tie bolt ①.
3. Remove O-ring ∅31 × 2 ② from housing ①.



5. REASSEMBLY

Reassembly is carried out in the reverse order.

Note: If new seals are fitted, grease them lightly before fitting.

1. Lay O-ring ∅31 × 2 ② in housing ①.
2. Screw filter insert ③ onto tie bolt ①..
3. Screw bowl ④ into housing ① and tighten it hand-tight.

6. DISPOSAL

The method of disposal of packaging and discarded parts must comply with local regulations.
The supplier will take over responsibility for the disposal of used filter inserts if they are returned.

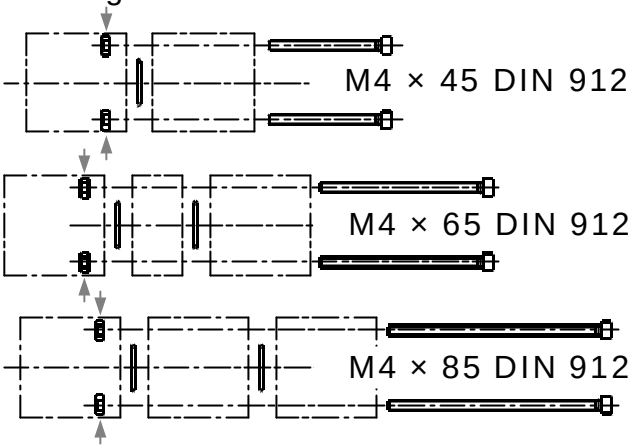
7. ASSEMBLY OF SEVERAL COMPONENTS

Only components of the same size can be assembled into combined units.

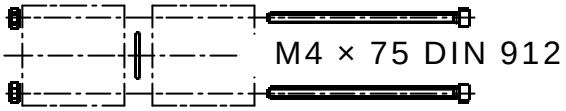
7.1. Assembly of Pressure Regulators or Filter-Regulators with Other Components

1. Remove the black cover plates from the inlets and outlets of the components you wish to assemble.
   The coloured cover plates remain on the component (filter, lubricator), through which the assembly screws will go.
2. Remove the coloured cover plates from the component (regulator, filter-regulator) in whose recesses the nuts will be placed.
3. Turn the component so that the flange surface which is to be joined to the other component is on top.

4. Lay the O-ring from the coupling kit on the flange surface.
5. Place the hexagonal nuts in the recesses of the component.
6. Place the other component on the flange surface.
7. Push the screws into the through-holes of the other component.
8. Tighten the screws.
9. Fit the black cover plates over the inlets and outlets of the components.
10. Fit the coloured cover plates.



7.2. Assembly of Oil Mist Lubricators with Filters or Filters with Other Types of Filter



1. Remove the black cover plates from the inlets and outlets of the components you wish to assemble. The coloured cover plates remain on the components.
2. Turn the component so that the flange surface which is to be joined to the other component is on top.
3. Lay the O-ring from the coupling kit on the flange surface.
4. Place the hexagonal nuts in the recesses of the component.
5. Place the other component on the flange surface.
6. Push the screws into the through-holes of the other component.
7. Tighten the screws.
8. Fit the black cover plates over the inlets and outlets of the components.