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 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 quoted as gauge pressure		
Port size			G1/8	G1/4	G3/8
Condensate drainage			Standard: manual On request: semi-automatic with pressure relief		
Installation			Vertical, bowl downwards		
Medium and ambient temperature range	ϑ_{min} ϑ_{max}	°C °C	+1,5 +50 at 10 bar (other temperatures on request)		
Weight (mass)		kg	0,3		
Pneumatic Characteristics					
Operating pressure range Inlet	p_{1min} p_{1max}	bar	0 16		
Maximum flow rate ①	Q_n	l/min m³/h	**200** **12**	**200** **12**	**200** **12**
Pressure drop at maximum flow rate	Δp	bar	Ca. 0,07 with new filter element to Ca. 0,3 during operation (saturated element)		
Filtration efficiency at maximum flow rate	η	%	Over 99,999%, Solids >0,01µm (DOP or BS 3928, 2577)		

① at 6 bar

2. INSTALLATION INSTRUCTIONS

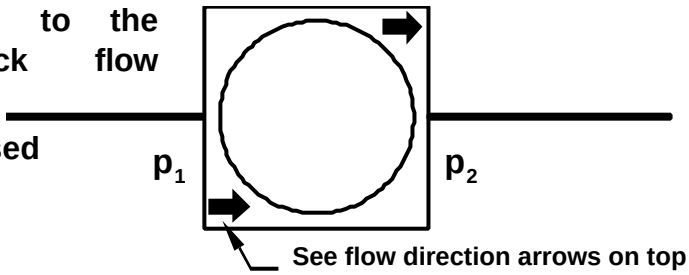
Warning:

The unit must only be used 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 5 µm (yellow) must always be installed before the submicrofilter (as close as 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.). If in doubt, please consult your sales contact.

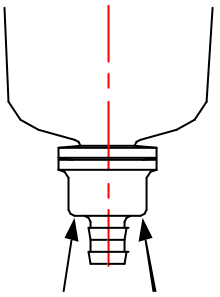
1. **Clean any rust particles or other dirt out of the tubing.**
2. **Fit a mounting bracket, if applicable.**
3. **Connect the tubing to the submicrofilter (check flow direction!).**
4. **Turn on the compressed air supply.**



3. MAINTENANCE

3.1. Manual Drainage

Push the plastic part up against the bowl to open the valve and drain the condensate.
The condensate level must never be above the „maximum“ mark on the bowl.



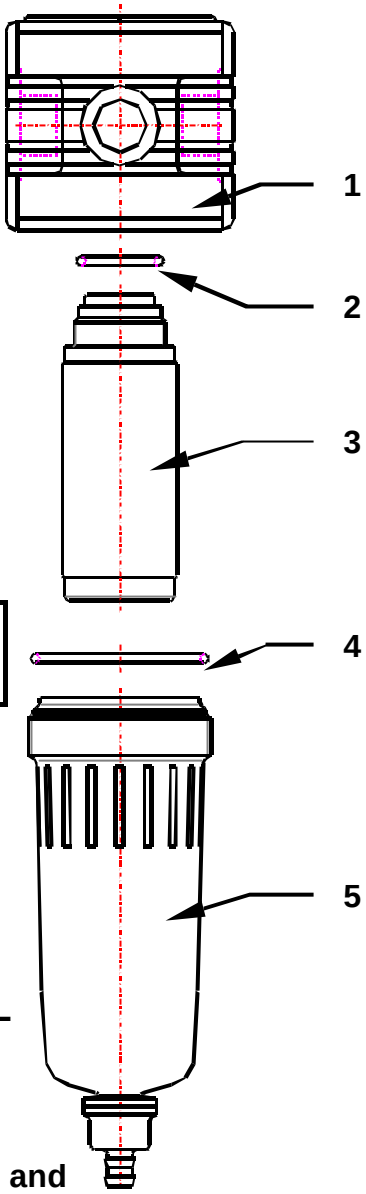
3.2. Cleaning

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 the 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 depressurized!**

1. **Screw off bowl ⑤.**
2. **Screw filter insert ③ out of housing ①.**
3. **Remove O-ring ∅15 × 2 ② from filter insert ③.**
4. **Take O-ring ∅35 × 2 ④ out of housing ①.**



5. REASSEMBLY

Reassembly of the unit is carried out in reverse order.

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

1. **Place O-ring ∅35 × 2 ④ in housing ①.**
2. **Fit O-ring ∅15 × 2 ② onto filter insert ③.**
3. **Screw filter insert ③ into housing ①.**
4. **Screw bowl ⑤ into housing ① hand-tight.**

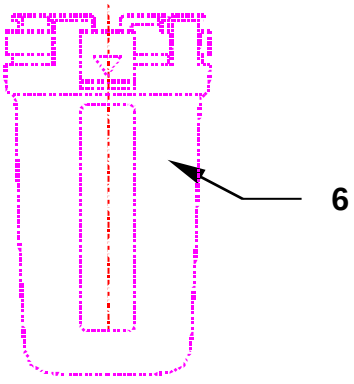
6. FITTING AND REMOVING THE BOWL GUARD ⑥

Fitting:

Locate lugs of bowl guard ⑥ in recess of housing ① and lock it by turning it to the right.

Removal:

Press release catch (see arrow) and turn bowl guard.

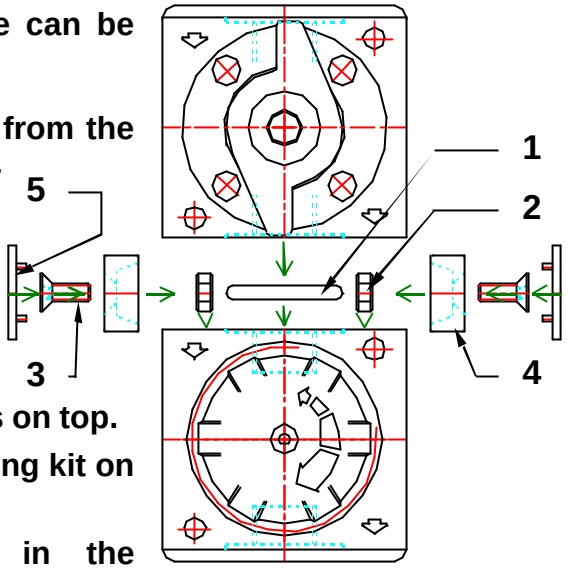


7. DISPOSAL

The method of disposal of packaging and discarded parts must comply with local regulations.

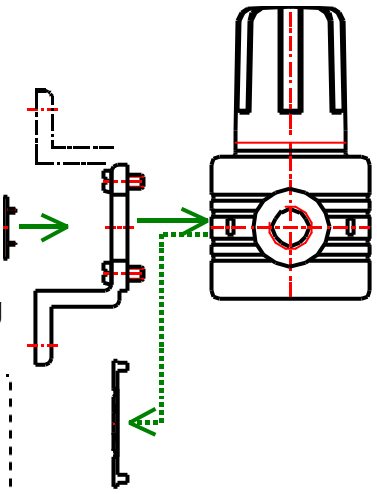
8. ASSEMBLY OF SEVERAL COMPONENTS

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



1. **Remove the black cover plates from the inlets and outlets of the components you wish to assemble. The coloured cover plates remain in place.**
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 ① from the coupling kit on the flange surface.**
4. **Place the hexagon nuts ② in the recesses on the component.**
5. **Place the other component on the flange surface.**
6. **Place the clamping cones ④ with the screws ③ in the recesses on the components.**
7. **Tighten the clamping screws.**
8. **Push the small cover plates ⑤ from the coupling kit on to the clamping cones.**

9. FITTING THE MOUNTING BRACKET



1. **Remove the coloured cover plate from the component.**
2. **Screw the mounting bracket to the component with the screws provided using a Phillips screwdriver.**

Note: **The mounting bracket can be fitted with the mounting strap either upwards or downwards.**