Installation and operating manual
SMF – Microfilter

Safety instruction

- Depressurize the system before carrying out any work on the piping.
- Installation and maintenance work may only be carried out when filter is not under pressure.
- Installation and maintenance work may only be carried out by trained and experienced stuff.
- Do not exceed max. operating pressure or operating temperature range (see data label).
- Use original spare parts only.
- Use filter for the appropriate purpose only.

Appropriate use

SMF filters may only be used for their intended purpose. These filters are intended exclusively for the

1. **following purpose:**
   Removal of Solid Particles: Micro filters can separate very fine solid particles such as dust, dirt, rust, and other suspended particles from compressed air.
2. **Removal of Oil and Oil Vapors:**
   These filters can eliminate oil particles and oil vapors that may be
3. **present in the compressed air stream**, thereby improving the quality of the compressed air.
4. **Moisture Removal:**
   Some micro filters are designed to reduce the moisture content in compressed air, helping to prevent corrosion and rusting of equipment.
5. **Protection of Equipment:**
   Using micro filters helps protect pneumatic equipment and tools, increasing their service life as particles and contaminants can damage sensitive components.
6. **Increased Efficiency:**
   By removing contaminants and unwanted particles, micro filters can enhance the efficiency and performance of compressed air systems.

Any other form of use or one going beyond this shall be considered as inappropriate. We shall have no liability whatsoever for any damage incurred as result.

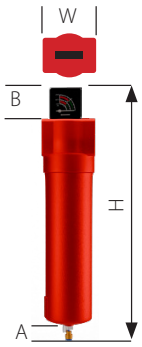
Warranty exclusion

The guarantee shall be void if:

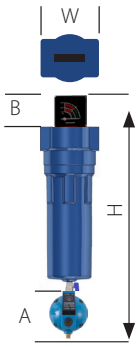
- The installation and operating manual were not followed with respect to installation, initial commissioning and maintenance.
- The unit was not operated properly and appropriately.
- The unit was operated when it was clearly defective.
- Non-original spare parts or replacement parts were used.
- The unit was not operated within the permissible technical parameters.
- Unauthorized construction changes were made to the unit or if the unit has been opened/disassembled by an unauthorized person.

Technical Specifications

Model	Pipe Size inch	Flow Rate			Element Model	Dimension (mm)				Pressure Range (bar)	Temp Range (°C)
		l/S	m^3/min	cfm		W	H	A	B		
SMF 132	1/2	36,7	2,2	77,7	SF 132	109	477	28	80	5 - 13	1,5 - 65
SMF 180	3/4	50,0	3,0	106,0	SF 180	109	477	28	80	5 - 13	1,5 - 65
SMF 270	1	75,0	4,5	159,0	SF 270	109	477	28	80	5 - 13	1,5 - 65
SMF 372	1 - 1/4	103,3	6,2	219,0	SF 372	109	625	28	80	5 - 13	1,5 - 65
SMF 432	1 - 1/2	120,0	7,2	254,2	SF 432	109	625	28	80	5 - 13	1,5 - 65
SMF 450 110	1 - 1/2	166,7	10,0	353,2	SF 450110	125	760	130	80	5 - 18	1,5 - 85
SMF 450 160	2	250,0	15,0	529,8	SF 450160	175	790	130	80	5 - 18	1,5 - 85
SMF 450 210	2	333,3	20,0	706,4	SF 450210	175	905	130	80	5 - 18	1,5 - 85
SMF 450 300	3	500,0	30,0	1059,5	SF 450300	205	875	130	80	5 - 18	1,5 - 85
SMF 450 400	3	666,7	40,0	1412,7	SF 450400	205	1020	130	80	5 - 18	1,5 - 85
SMF 450 500	3	833,3	50,0	1765,9	SF 450500	205	1185	130	80	5 - 18	1,5 - 85



SMF132 - 432



SMF450 110 - 450 500

X	Y	A
High efficiency general, protection, dust particles water mist and oil mist whose diameter more than 1µm can be removed the residual content of oil mist does not exceed 0.6 m^3/mg (21°C) 1PPM (w)	High efficiency removal filtration dust particles water mist and oil mist whose diameter more than 0.01µm can be removed the residual content of oil mist does not exceed 0.01 m^3/mg (21°C) 0.01ppm (w)	Dust particles whose diameter more than 0.01µm oil vapor and odor can be removed the maximum residual content of oil vapor does not exceed 0.003 m^3/mg (21°C) 0.003ppm (w)

Filtration Grade	X	Y	A
Size of solid particles (ISO 12500-3)	1µm	0.01µm	-
Filtration performance of solid particles (ISO 12500-3)	+99.999%	+99.999%	+99.999%
Filtration performance of oil (ISO12500-1)	+80%	+99.9%	-
Residual oil content (ISO 12500-1)	0.6mg/m^3	<0.01mg/m^3	<0.004mg/m^3

Pressure	Barg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Psig	15	29	44	59	73	87	100	116	131	145	160	174	189	203	218	232
Correction Factor		0.38	0.53	0.65	0.63	0.85	0.93	1	1.07	1.13	1.19	1.23	1.31	1.36	1.41	1.46	1.51