

SMF Series Micro-Filter

Primary and Secondary Micro-Filters (X and Y)



These microfilters are for separating oil, water, and solid particles down to a size of 0.01 micron. In the design of the arrangement structure of these filters, the purpose of the first filter is primary purification and filtration, and protection of the second filter in the system against bulk contamination. If the filter operates in humid conditions and air cannot pass through the filter element, the air will force liquid particles through the filter element media under pressure, causing pressure drop and reduced filter performance, which necessitates its replacement.

Activated Carbon Micro-Filters (A)

Oil vapor in gaseous form easily passes through primary filters. To effectively absorb these vapors, activated carbon filters (Model A) are designed with a large volume of activated carbon. Since humid air reduces the efficiency of activated carbon in absorbing contaminants, these filters are usually installed after the air dryer. This ensures that oil vapor and unpleasant odors are completely removed.

Features:

- The filter body is made of cast aluminum and has a durable structure.
- The filter body decreases before painting and undergoes an anti-abrasion treatment.
- The possibility of parallel installation of these filters makes installation and maintenance easy.
- Equipped with a differential pressure indicator and auto drain.

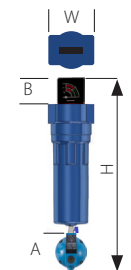
Advantages:

- Protection of downstream equipment.
- Providing high-quality compressed air to achieve international standards.
- Reducing production and maintenance costs.
- Improving performance and quality.
- Usable for all types of air compressors and compatible with various lubricants used.



Technical Specifications

Model	Pipe Size inch	Flow Rate			Element Model	Dimension (mm)				Pressure Range (bar)	Temp Range (°C)
		l/s	m³/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



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 m³/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 m³/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 m³/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/m³	<0.01mg/m³	<0.004mg/m³

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