



mikropor

Manufacturing Forward

COMPRESSED AIR SYSTEMS

PRODUCT CATALOG



mikropor

01	COMPANY INTRODUCTION	04
02	FILTRATION AND SEPARATION	06
03	COMPRESSED AIR DRYERS	42
04	GAS GENERATION SYSTEMS	72



COMPANY INTRODUCTION



Mikropor began its journey in 1987 with a passion to create “tomorrow’s technology” and has become one of the leading manufacturers of atmospheric air filtration solutions and compressed air treatment systems for a variety of industries.

By closely following the latest developments in technology, Mikropor’s “Best in Class” products and solutions are appreciated by customers in more than 140 countries.

The company’s sustainable growth has been provided by its passion for innovation and commitment to quality, as well as its dedication to technology. Mikropor is an environmentally conscious company that values people, while developing products that extend the needs and expectations of customers.

With this mission, Mikropor continues to become one of the most recognized brands in the world by expanding its global penetration in the field of technological filtration and contributes to a healthier planet.

02

FILTRATION AND SEPARATION

AIR FILTERS	8
MIFH SERIES MIKROLINE AIR INTAKE FILTERS	9
MAFH SERIES MAKROLINE AIR INTAKE FILTERS	10
AIR/OIL SEPARATORS	12
AIR FILTER ELEMENTS	14
REPLACEMENT ELEMENTS	16
G WS SERIES WATER SEPARATORS	17
F WS SERIES FLANGED WATER SEPERATORS	18
G SERIES COMPRESSED AIR FILTERS	20
GO SERIES COMPRESSED AIR FILTERS	22
GON SERIES COMPRESSED AIR FILTERS	25
F SERIES FLANGED AIR FILTERS	30
ELM SERIES MIST ELIMINATOR AIR FILTERS	32
G-ELM SERIES MIST ELIMINATOR AIR FILTERS	34
CARBOLESCER	35
HP&HGH SERIES HIGH PRESSURE AIR FILTERS	36
MCC SERIES CATALYTIC CONVERTER	38



FILTRATION AND
SEPARATION

Air Filters for Air Compressors

Mikropor Air Filters are the first line of defence for any air compressor and have a significant impact on the service life of the compressor, lubricant, air/oil separators and oil filters.

Mikropor offers the highest efficiency air intake filters in the market, outperforming the competition and delivering more value to customers.

Micro-Glass and Mini-Pleat System in Air Filters

Our Micro-Glass Mini-Pleated Air Filters reach a 99.99% efficiency faster than cellulose air filters and provide better protection by allowing fewer contaminants to pass through the media.

Mikropor Nano Media holds up to five times more contaminants than conventional cellulose air filters, making them ideal for extended maintenance periods.



The Mikropor Mini-Pleat system guarantees equal space between each filter pleat and maintains "V" pleated geometry throughout the service life of the filter. As a result, 100% of the surface area performs equally and delivers the expected protection, while minimizing pressure drops.



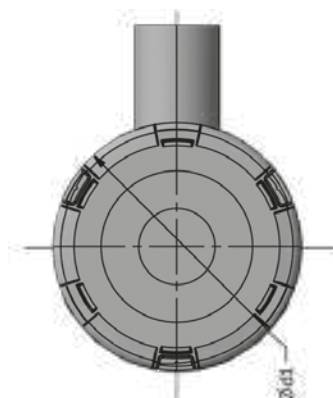
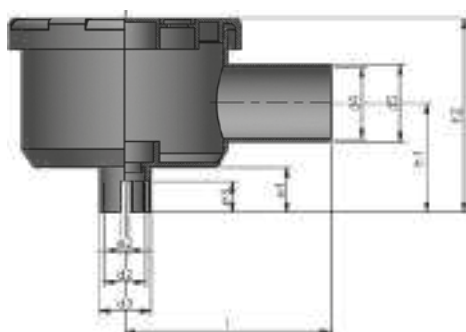
▶ MIFH SERIES MIKROLINE AIR INTAKE FILTERS

FILTRATION AND SEPARATION ◀

Mikropor's air intake elements are designed for the removal of dust or particulate in the air intake systems of compressors, machines, pumps, blowers, etc. Based on the density of the dust load, Mikropor offers two series with different sizes and capacities: Mikroline and Makroline.

Applications

Mikroline Air Intake Filters are well suited for applications with low dust loads such as power generators, piston compressors, as well as air cleaner ventilation of gear units and the filtration of liquid tanks.



General Working Conditions

Type	Overall Design	Volumetric Flow Range	Continuous Operating Temperature	Short Time Maximum Operating Temperature
Mikroline Air Intake Filters	Highly Reliable Plastic Air Cleaner Housing with High Quality element	1 m ³ /min to 4 m ³ /min	-30°C to +100°C	+120°C

Dimensions

Model	d1	d2	d3	d4	d5	e1	e2	e3	e4	h1	h2	l	Nominal Flow Rate (m ³ /min)	Compressor Connection Type
MIFH-0120	112	20	25	35	38	22	4	15	-	53	94	100	1	Internal Tightened
MIFH-0130	112	30	35	35	38	22	4	15	-	53	94	100	1	Internal Tightened
MIFH-0140	112	40	45	35	38	22	4	15	-	53	94	100	1	Internal Tightened
MIFH-0240	140	40	45	35	38	22	4	15	-	67	114	120	2	Internal Tightened
MIFH-0248	140	48	53	35	38	22	4	15	-	67	114	120	2	Internal Tightened
MIFH-0252	140	52	57	35	38	22	4	15	-	67	114	120	2	Internal Tightened
MIFH-0260	140	60	65	35	38	22	4	15	-	67	114	120	2	Internal Tightened
MIFH-0271	140	71	76	35	38	22	4	15	-	67	114	120	2	Internal Tightened
MIFH-0440	181	40	45	58	60	22	4	15	-	102	164	154,5	4	Internal Tightened
MIFH-0452	181	52	57	58	60	22	4	15	-	102	164	154,5	4	Internal Tightened
MIFH-0460	181	60	65	58	60	22	4	15	-	102	164	154,5	4	Internal Tightened
MIFH-0462	181	62	67	58	60	22	4	15	-	102	164	154,5	4	Internal Tightened
MIFH-0468	181	68	73	58	60	22	4	15	-	102	164	154,5	4	Internal Tightened
MIFH-0471	181	71	76	58	60	22	4	15	-	102	164	154,5	4	Internal Tightened
MIFH-0475	181	75	78	58	60	22	4	15	-	102	164	154,5	4	Internal Tightened
MIFH-0478	181	78	83	58	60	22	4	15	-	102	164	154,5	4	Internal Tightened

Design

Mikropor Makroline Air Intake Filters are designed to provide maximum performance for customers with extremely high dust capacity and low pressure drop air intake filter demands. Makroline filters are also suitable for use in higher temperature environments.

Applications

Mikropor Makroline Air Intake Filters are designed for medium and heavy dust load conditions for applications such as Air Compressors, Construction Machines, Agricultural Machines, Harvesting Machines, etc.

Advantages

The advantages of Makroline Air Intake Filters are:

- Operational reliability,
- Long service life thanks to its highly efficient and reliable filter elements,
- Low pressure drop,
- Impact resistant corrosion free housing polypropylene,
- Excellent price/performance ratio.

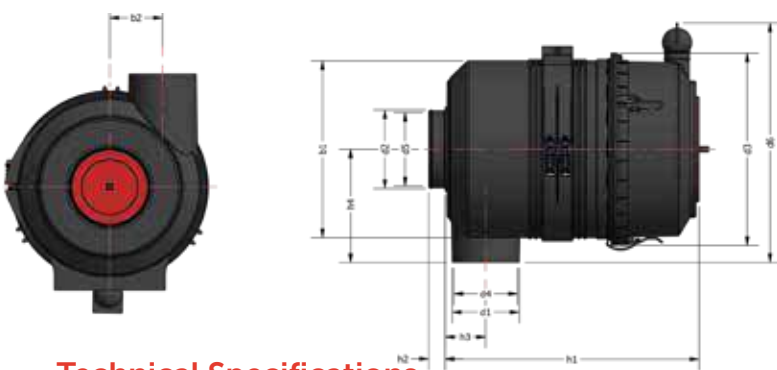
Mikropor Makroline Air Intake Filters’ user friendly and flexible bracket system provides the ability for easy installation. The brackets can be turned in various positions, providing numerous fitting possibilities. Mikropor’s versatile production offers these brackets in different sizes.



General Working Conditions for Makroline Air Intake Filters

Type	Overall Design	Volumetric Flow Range (m ³ /min)	Continuous Operating Temperature	Short Time Maximum Operating Temperature
Makroline Air Intake Filters	Highly Reliable Plastic Air Cleaner Housing with High Quality Element Center Tube in Housing Radial Seal	3 m ³ /min to 28 m ³ /min	-30°C to +80°C	+100°C

1) Air Intake Filter Models with Single Inlet



Technical Specifications

Model	b1	b2	d1	d2	d3	d4	d5	d6	h1	h2	h3	h4	Nominal Flow Rate (m ³ /min)	Compressor Connection Type
MAFH-02030	164	48	55	30	185	52	23	245	263	27	43	103	1-3	External Clamped
MAFH-02040	164	48	55	40	185	52	33	245	263	27	43	103	1-3	External Clamped
MAFH-02050	164	48	55	50	185	52	43	245	263	27	43	103	1-3	External Clamped
MAFH-05040	179	50	62	40	200	58	34	260	330	27	47	112	2-5	External Clamped
MAFH-05050	179	50	62	50	200	58	44	260	330	27	47	112	2-5	External Clamped
MAFH-05060	179	50	62	60	200	58	54	260	330	27	47	112	2-5	External Clamped
MAFH-05070	179	50	62	70	200	58	63	260	330	27	47	112	2-5	External Clamped
MAFH-0576	179	50	62	76	200	58	70	260	330	27	47	112	2-5	External Clamped

Model	b1	b2	d1	d2	d3	d4	d5	d6	h1	h2	h3	h4	Nominal Flow Rate (m ³ /min)	Compressor Connection Type
MAFH-0350	142	45	52	50	160	49	47	209	292	26	56	94	3-4	External Clamped
MAFH-0360	142	45	52	60	160	49	57	209	292	26	56	94	3-4	External Clamped
MAFH-09070	230	67	82	70	251	78	63	320	388	27	55	145	4-9	External Clamped
MAFH-09090	230	67	82	90	251	78	83	320	263	27	43	103	4-9	External Clamped
MAFH-09100	230	67	82	100	251	78	93	320	263	27	43	103	4-9	External Clamped
MAFH-0870	200	53	94	70	226	89	64	293	263	27	43	103	8-10	External Clamped
MAFH-08100	200	53	94	100	226	89	94	293	330	27	47	112	8-10	External Clamped
MAFH-1270	200	53	94	70	227	89	64	293	330	27	47	112	12-14	External Clamped
MAFH-12100	200	53	94	100	227	89	94	293	330	27	47	112	12-14	External Clamped
MAFH-17100	297	86.5	110	100	323	104	93	399.5	330	27	47	112	17	External Clamped
MAFH-17110	297	86.5	110	110	323	104	103	399.5	292	26	56	94	17	External Clamped
MAFH-17130	297	86.5	110	130	323	104	123	399.5	292	26	56	94	17	External Clamped

2) Air Intake Filter Models with Double Inlet



Technical Specifications

Model	a1	b1	d1	d2	d3	d4	h1	h2	Nominal Flow Rate (m ³ /min)	Compressor Con. Type
MAFH-19100	436	322	132	100	352	424	414,5	42	19	External Clamped
MAFH-19110	436	322	132	110	352	424	414,5	42	19	External Clamped
MAFH-19130	436	322	132	130	352	424	414,5	42	19	External Clamped
MAFH-19150	436	322	132	150	352	424	414,5	42	21	External Clamped
MAFH-21100	436	322	132	100	352	424	444,5	42	21	External Clamped
MAFH-21110	436	322	132	110	352	424	444,5	42	21	External Clamped
MAFH-21130	436	322	132	130	352	424	444,5	42	23	External Clamped
MAFH-21150	436	322	132	150	352	424	444,5	42	23	External Clamped
MAFH-23100	436	322	132	100	352	424	474,5	42	23	External Clamped
MAFH-23110	436	322	132	110	352	424	474,5	42	23	External Clamped
MAFH-23130	436	322	132	130	352	424	474,5	42	25	External Clamped
MAFH-23150	436	322	132	150	352	424	474,5	42	25	External Clamped
MAFH-25100	436	322	132	100	352	424	504,5	42	25	External Clamped
MAFH-25110	436	322	132	110	352	424	504,5	42	25	External Clamped
MAFH-25130	436	322	132	130	352	424	504,5	42	27	External Clamped
MAFH-25150	436	322	132	150	352	424	504,5	42	27	External Clamped
MAFH-27100	436	322	132	100	352	424	534,5	42	27	External Clamped
MAFH-27110	436	322	132	110	352	424	534,5	42	27	External Clamped
MAFH-27130	436	322	132	130	352	424	534,5	42	29	External Clamped
MAFH-27150	436	322	132	150	352	424	534,5	42	29	External Clamped
MAFH-29100	436	322	132	100	352	424	534,5	42	29	External Clamped
MAFH-29110	436	322	132	110	352	424	534,5	42	29	External Clamped
MAFH-29130	436	322	132	130	352	424	534,5	42	29	External Clamped
MAFH-29150	436	322	132	150	352	424	534,5	42	29	External Clamped

Why Mikropor Separators?

With over 3000 Air/Oil Separator designs for compressors, Mikropor offers multiple options for the full range of air flow and performance requirements.

Mikropor Air/Oil Separators

Conventional, pleated, depth construction, spin-on and state-of-the-art “sep-n-sep” design separators allow Mikropor to cover the air/oil separation needs of the entire compressor applications.



Air Flow Rates of Mikropor Air/Oil Separators (m³/min @ 7 bar working pressure)

Dimensions

Air/Oil Separator Overall Height (mm)

		150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
110	Conventional	1	2	2																
	3S	3	5	5																
	Sep-n-Sep®																			
135	Conventional	2	2	3	3	4	5													
	3S	4	5	6	8	8	9													
	Sep-n-Sep®																			
150	Conventional	2	2.5	3	4	5	5	6	7											
	3S	4	5	7	8	10	11	12	13											
	Sep-n-Sep®																			
170	Conventional	2	3	4	5	5	6	7	8	9	9									
	3S	4	6	8	10	11.5	13	14	16	17	19									
	Sep-n-Sep®																			
200	Conventional		3	5	5	7	7	8	9	10	11	12								
	3S		7	9	11	13	15	17	19	21	23	25								
	Sep-n-Sep®																			
220	Conventional			5	6	7	8	9	11	12	13	14	15	16						
	3S			10	13	15	17	19	22	23	26	28	30	33						
	Sep-n-Sep®																			
270	Conventional			7	8	9	10	12	13	15	16	17	19	20	22	23	24			
	3S			14	15	18	21	24	27	29	32	35	38	41	44	47	49			
	Sep-n-Sep®			21	23	27	31	36	40	44	48	52	56	61	66	70	73			
300	Conventional			8	9	10	12	13	15	17	18	20	21	23	24	26	28	29	31	
	3S			15	18	21	24	27	30	34	37	40	43	46	49	53	57			
	Sep-n-Sep®			24	28	32	37	41	46	53	57	62	66	71	76	82	88			
350	Conventional			10	12	14	16	18	20	22	24	26	28	30	32	34	36	38		
	3S			20	24	28	32	36	40	44	48	52	56	60						
	Sep-n-Sep®			32	38	44	50	56	63	69	75	81	88	94						
375	Conventional			11	13	15	17	19	21	23	25	27	29	32	33	35	37	39		
	3S			22	26	30	34	38	42	46	50	54	58							
	Sep-n-Sep®			34	40	47	54	60	66	72	79	85	91							
400	Conventional				15	17	19	21	23	25	27	29	32	34	36	38	40	42		
	3S				30	34	37	42	46	51	55	59								
	Sep-n-Sep®				47	52	59	67	73	81	88	94								
470	Conventional				20	22	25	27	30	33	35	37	41	43	45	48	51	54	56	
	3S				40	45	50	55												
	Sep-n-Sep®				63	71	79	87												
500	Conventional					24	27	30	33	36	39	42	45	48	51	54	56			
	3S					50	55	60												
	Sep-n-Sep®					82	91	100												

Conwrap Separators

Mikropor "Conwrap" Separators are standard wrapped style separators. These separators are designed for outside to inside flow and can be used with all oil injection Rotary Vane and Rotary Screw Compressors. Conwrap separators operate between 1 to 60 m³/min flow rate at 7 bar with 1 to 3 mg/m³ oil carry over.

"3S" Depth Construction Air/Oil Separators

The revolutionary Mikropor "3S" Separator is designed to fit the smaller separator housings without sacrificing operating performance. The "3S" separator has double to triple capacity when compared to a conventional separator with the same dimensions. The "3S" separator has 1/2 - 1/3 of the volume of a conventional separator functioning in the same operating conditions. This increased capacity is achieved with specially designed progressive type, deep bed, coalescing media using an increased number of wraps.

Pleated Air/Oil Separators

Pleated separators increase the media surface area to reach higher capacities while maintaining the dimensions. Mikropor manufactures dozens of pleated separator designs.

Zero Spin-On Type Air/Oil Separators

Mikropor Spin-On Type Air/Oil Separators are manufactured as exchangeable elements. Because Spin-Ons do not require a compressor housing, they permit uncomplicated and quick replacement without dismantling the compressor. Spin-On Type Air/Oil Separators are available for 0,5 to 7 m³/min flow rates operating at 7 bar.



CONWRAP



3S - SEPARATORS



PLEATED

Model	Maximum Flow Rate (m ³ /min @ 7 bar)	Dia 1 (mm)	Dia 2 (mm)	Height (mm)
Zero 10	0,5	Ø79	Ø80	84
Zero 20	1	Ø79	Ø83	137
Zero 30	2	Ø97	Ø100	214
Zero 40	1.5	Ø97	Ø100	175
Zero 50	4	Ø110	Ø111	261
Zero 60	3	Ø138	Ø141	192
Zero 70	6	Ø138	Ø141	314
Zero 80	7	Ø138	Ø141	349



▶ AIR FILTER ELEMENTS

Micro-Glass Fiber

High efficiency Micro-Glass nanofiber media (80 times finer than Cellulose Fiber) delivers higher targeted efficiencies, longer service life, wide chemical and synthetic lubricant compatibility even at extreme working temperatures.

Element 4 Levels

Mikropor offers four layers of Superior Protection—from 1 micron to 0.01 micron. Durable element construction and an efficient drain layer ensure continued performance with optimal element change periods.

Helix Tubes for Strength

Mikropor Compressed Air Filters have louvered stainless steel helix tubes providing increased strength and protection against severe pressure drops while improving performance by forcing air to pass diagonally through the element.

Synthetic Compatibility and Durable Epoxy

Mikropor Compressed Air Filters are compatible with all synthetic lubricants in the industry. Durable Epoxy securely bonds the robust end caps to the filter tubes and will not be affected by the synthetic lubricant in compressed air.

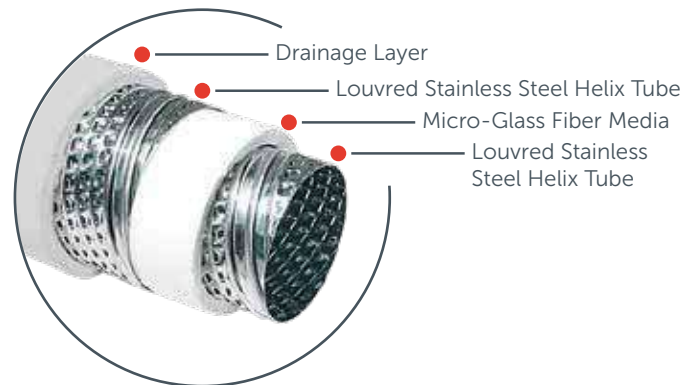
Test

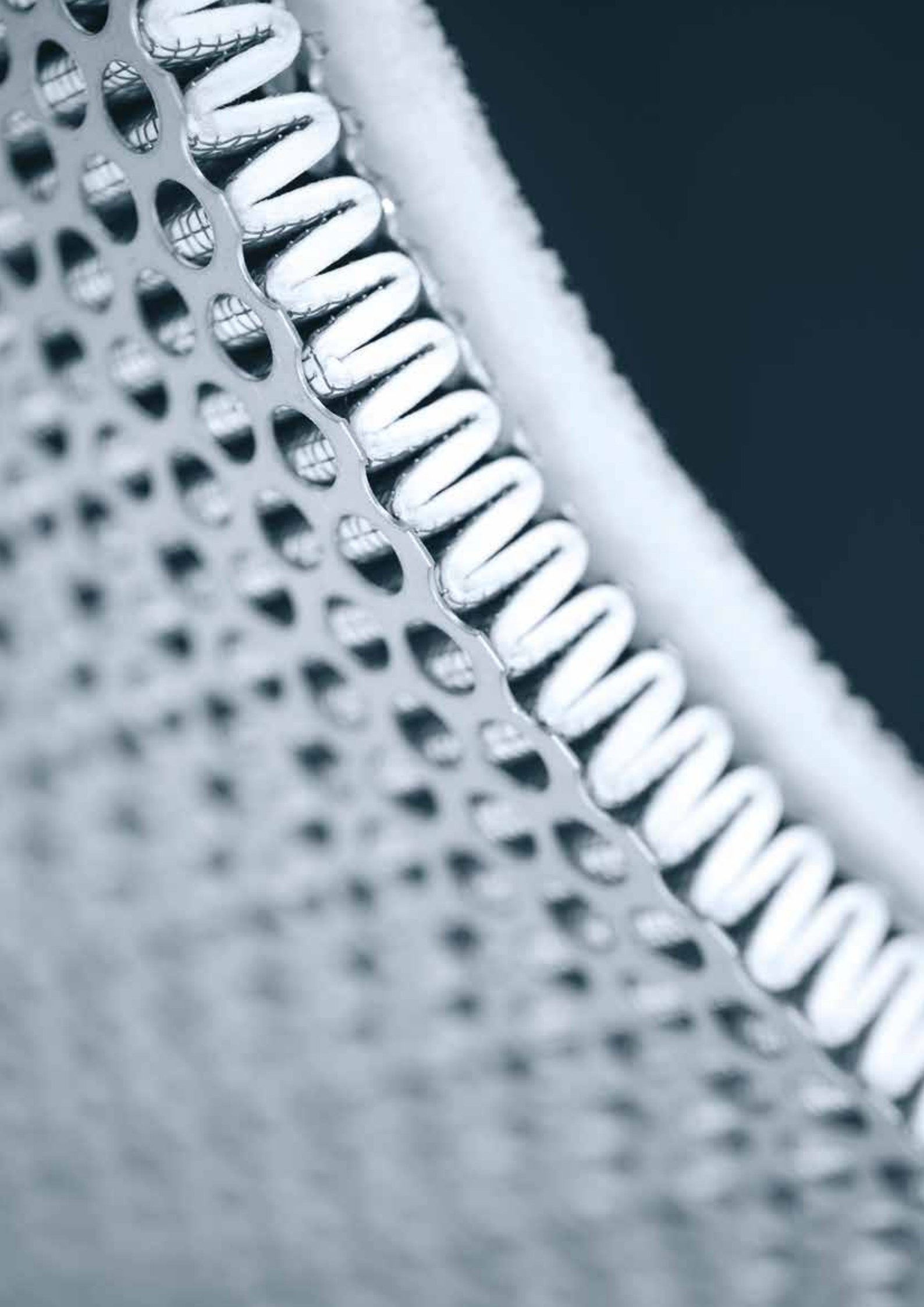
With over 30 years of experience Mikropor manufactures the best performing replacement elements in the industry. Through rigorous testing and validation processes Mikropor assures that the replacement elements perform equal to or better than the original elements. Replacement elements have been designed and tested in our state-of-the-art test laboratories.

Mikropor labs are capable of making the following tests;

- Differential pressure at given flow rates
- Particle efficiency tests
- Oil aerosols measurements
- Pressure dew point

All tests are conducted as per the relevant ISO 12500 test standards.







- ALMIG
- ATLAS COPCO
- BEA
- COMPAIR
- DELTECH
- DOMNICK HUNTER
- DOMNICK HUNTER (Evolution Range)
- FAI FILTER
- HANKISON
- HIROSS
- KAESER
- MTA
- OMI
- ULTRA FILTER
- WALKER
- ZANDER



Mikropor water separators have been designed for the removal of bulk liquid water and particulate from compressed air and gases. Unique centrifugal action removes contaminants at low-pressure drop for maximum energy saving.

Mikropor water separators are available from 1/4"-3" pipe sizes and for flows up to 2200 m³/h (1294 cfm).

Note: While highly efficient, condensate separators will not remove 100% of the oil from the air stream. Additional coalescing and particulate filters downstream may be required to remove the fine traces of oil, water and particles.

Note: Automatic drain valves are fitted as standard. All separator bodies are coated with electrostatic powder paint finish both inside and out.

Correction Factor

For maximum flow rate, multiply model flow rate show in the above table by the correction factor corresponding to the working pressure.

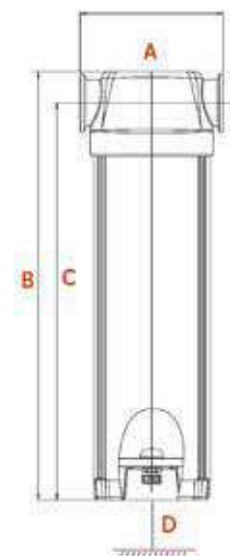
Operating Pressure (bar)	Psi	Correction Factor
1	15	0.5
3	44	0.71
5	73	0.87
7	100	1
9	131	1.12
11	160	1.22
13	189	1.32
15	218	1.44
16	232	1.57
20	290	1.63



Technical Specifications

For maximum flow rate, multiply model flow rate show in the above table by the correction factor corresponding to the working pressure.

Model	Connection Size	Flow Rate		Housing Dimensions (mm)			
		(m ³ /h)	(cfm)	A	B	C	D
G25WS	1/4"	25	14	103	257.5	236	160
G100WS	1/2"	100	58	103	257.5	236	210
G200WS	3/4"	200	117	123	304	277	285
G300WS	1"	300	176	123	304	277	380
G600WS	1 1/2"	600	353	123	320	285	470
G1200WS	2"	1200	706	160	484	443	560
G2200WS	3"	2200	1294	193	546	490	610



Max. Recommended Operating Temp.	Min. Recommended Operating Temp.	Typical Pressure Loss at Rated Flow	Max. Working Pressure
80°C	1.5°C	50 mbar	20 bar

Given flows are at 7 barg pressure with reference to 20°C and 1 bar atmospheric air suction as per ISO7183.

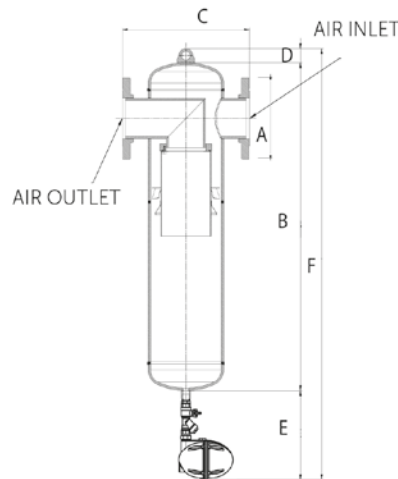
Mikropor flanged water separators have been designed for the removal of bulk liquid water and particulate from compressed air and gases. Unique centrifugal action removes contaminants at low-pressure drop for maximum energy savings. Mikropor flanged water separators are available from DN80-DN200 flange sizes and flows up to 14000 m³/h (8236 cfm) **(For larger sizes please contact our sales team).**

Note: While highly efficient, condensate separators will not remove all of the oil from the air stream. Additional coalescing and particulate filters downstream may be required to remove the fine traces of oil, water and particles.

Correction Factor

For maximum flow rates, multiply model flow rate show in the above table by the correction factor corresponding to the working pressure.

Operating Pressure (bar)	PSI	Correction Factor
1	15	0.5
3	44	0.71
5	73	0.87
7	100	1
9	131	1.12
11	160	1.22
13	189	1.32
14	200	1.38



Max. Recommended Operating Temperature	Min. Recommended Operating Temperature	Typical Pressure Loss at Rated Flow	Max. Working Pressure
80°C	1.5°C	50 mbar	14 bar

Technical Specifications

Model	Connection Size	Flow Rate		Housing Dimensions (mm)					
		(m ³ /h)	(cfm)	A	B	C	D	E	F
F-2500WS	DN80	2500	1407.5	200	934	450	75	280	1289
F-3200WS	DN100	3200	1882.3	220	964	450	75	280	1319
F-4300WS	DN100	4300	2529.4	220	982	530	75	280	1283
F-6500WS	DN150	6500	3823.5	285	1092	580	75	280	1447
F-8500WS	DN150	8500	5000	285	1091	650	75	280	1446
F-11000WS	DN200	11000	6470.5	340	1168	750	75	280	1523
F-14000WS	DN200	14000	8235.2	340	1201	800	75	280	1556

Given flows are at 7 barg pressure with reference to 20°C and 1 bar atmospheric air suction as per ISO7183.





Mikropor Compressed Air Filters have been designed to meet all requirements of the compressed air filtration world. These air filters provide more comfortable usage for end users with an increased endurance, higher efficiency at lower pressure drop and more port size options.

Filtration

Due to our usage of deep pleating technique, the filtration area is significantly increased remarkably, which leads to a better filtration and higher dirt holding capacity. Mikropor Compressed Air Filters have been designed to remove air borne contamination in compressed air stream, delivering energy efficient operation and reliable performance.

Features

The air filters have four efficiency ratings, removing contaminants as small 0.01 micron at up to 290 psi (20 bar)- 1/4" to 3" NPT/BSP pipe sizes. A protected auto float drain (2 mm orifice) is standard for optimal and reliable removal of liquid contaminants.

These air filters have a zero-porosity aluminium and durable epoxy powder-coat finish, along with a corrosion-resistant internal coating for a long service life. Filter combinations are configured to meet specific application requirements. Filters comply with PED and perform as per related ISO 8573 standards. These filters may be equipped with differential pressure gauges for easy maintenance and energy efficiency.

Mikropor compressed air filters are always recommended with this system.

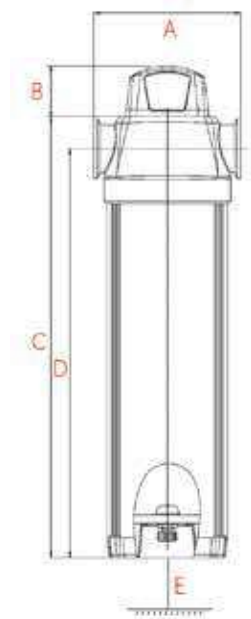
Types of Compressed Air Filters

- P** Pre-Filter / Particulate Filter (Filter/Element air flow direction is outside to inside)
- X** General Purpose Filter / Water Removal (Filter/Element air flow direction is inside to outside)
- Y** Coalescing Filter / Oil Removal (Filter/Element air flow direction is inside to outside)
- A** Activated Carbon Filter / Odor Removal (Filter/Element air flow direction is outside to inside)

Correction Factor

For maximum flow rate, multiply model flow rate show in the above table by the correction factor corresponding to the working pressure.

Operating Pressure (bar)	PSI	Correction Factor
1	15	0.5
3	44	0.71
5	73	0.87
7	100	1
9	131	1.12
11	160	1.22
13	189	1.32
15	218	1.44
16	232	1.50
18	261	1.57
20	290	1.63



Technical Specifications

Model	Connection Size			Flow Rate		Max. Working Pressure (bar)	Element Model	Housing Dimensions (mm)				
				(m ³ /h)	(cfm)			A	B	C	D	E
G20	-	1/4"	-	20	12	20	M20	75	45	193	175	100
G40	-	3/8"	-	40	24	20	M40	75	45	193	175	100
G25	1/4"	3/8"	1/2"	25	15	20	M25	102	45	219.5	197.5	125
G50	1/4"	3/8"	1/2"	50	30	20	M50	102	45	219.5	197.5	125
G100	3/8"	1/2"	-	100	58	20	M100	102	45	257.5	235.5	165
G150	1/2"	3/4"	1"	150	88	20	M150	123	45	302.5	275.5	205
G200	3/4"	1"	-	200	117	20	M200	123	45	366.5	339.5	265
G250	3/4"	1"	-	250	147	20	M250	123	45	406.5	379.5	315
G300	1"	1 1/4"	1 1/2"	300	176	20	M300	123	45	463	427.5	365
G500	1 1/4"	1 1/2"	-	500	294	20	M500	123	45	493	457.5	395
G600	1 1/4"	1 1/2"	-	600	353	20	M600	123	45	538	502.5	440
G851	1 1/4"	1 1/2"	2"	851	500	20	M851	160	45	625.5	583.8	495
G1210	2"	-	-	1210	712	20	M1210	160	45	695.5	653.8	565
G1520	2"	2 1/2"	3"	1520	930	20	M1520	194	45	730	672	445
G1820	2 1/2"	3"	-	1820	1140	20	M1820	194	45	870	813	565
G2220	3"	-	-	2220	1380	20	M2220	194	45	924	867	615
G2620	3"	-	-	2620	1541	20	M2620	194	45	1068	1011	695

Specifications	Pre Filtering	General Purpose	Oil Removal	Activated Carbon	Indicator Type
Grade	P	X	Y	A	Gauge with or without electrical contact
Particle Removal (Micron)	5	1	0.01	0.01	Drain Type
Max. Oil Carryover at 21°C (mg/m ³)	5	0.5	0.01	0.003	
Max. Working Temperature (°C)	80	80	80	25	External Float Type
Initial Pressure Loss (mbar)	40	80	100	80	Zero-loss Drain
Pressure Loss for Element Change (mbar)	700	700	700	700	Manual
Element Color Mode	White	White	White	Metal SS	

Notes

- 1) Grade A must not operate in oil saturated conditions.
- 2) Grade A elements should be replaced periodically to suit the applications but must be changed at least every six months.
- 3) Grade A will not remove certain gases including carbon monoxide and carbon dioxide. Please refer to works if in doubt.
- 4) Flow rates are based on a 7 bar operating pressure, for flows at other pressures use correction factor given above.
- 5) All filters are suitable for use with mineral and synthetic oils.
- 6) Gauge type pressure indicators are fitted to models G20 to G2620 as standard.
- 7) All filters are in conformity with the Pressure Equipment Directive (97/23/EC).

Ordering

The complete filter model number contains the size and grade, example - 1" general purpose filter model G250MX with replacement filter element model M250X. 250 Represent 250 m³/h capacity and X represents the general purpose element.

New addition to our G series, Mikropor GO series compressed air filters are designed for easy element replacement for "zero clearance" ability.

Features

The air filters have four efficiency ratings, removing contaminants as small as 0.01 micron at up to 290 psi (20 bar) - 1/4" to 3" NPT/BSP pipe sizes. A protected auto float drain (2 mm orifice) is standard for optimal and reliable removal of liquid contaminants.

These air filters have zero-porosity aluminium and durable epoxy powder-coat finish, along with a corrosion resistant internal coating for a long service life.

Filter combinations are configured to meet specific application requirements. Filters comply with PED and perform as per related ISO 8573 standards.

These filters may be equipped with differential pressure gauges for easy maintenance and energy efficiency. Mikropor compressed air filters are always recommended with this system.

Element Features

Mikropor offers Superior protection - from 1 micron to 0,01 micron. Durable element construction and efficient drain layer ensures continued performance with optimal element change intervals. Elements are also easy to replace with the head clips.

Mikropor Elements Have Been Designed for Easy Handling

- 1- Deep pleating also enables a lower pressure drop.
- 2- Supreme collapse resistance due to usage of fluted stainless tube, providing strength against pressure drops while improving the performance by passing air diagonally through the element.
- 3- PVC impregnated foam favors water/oil drainage.



Head Clamping

Head Clamping provides serial connection of filters without any extra piping

Drainage Ribs

Drainage Ribs favors the humidity flow

Correction Factor

For maximum flow rate, multiply model flow rate show in the above table by the correction factor corresponding to the working pressure.

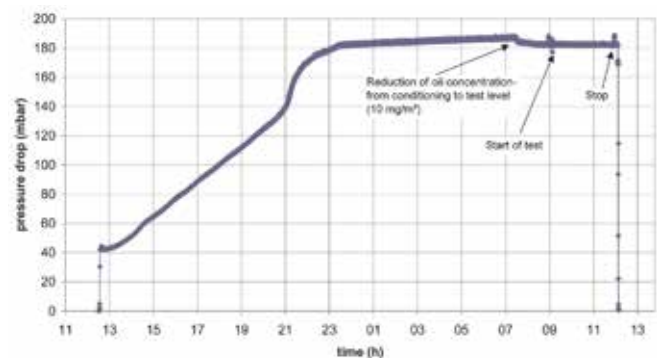
Operating Pressure (bar)	PSI	Correction Factor
1	15	0.5
3	44	0.71
5	73	0.87
7	100	1
9	131	1.12
11	160	1.22
13	189	1.32
15	218	1.44
16	232	1.50
18	261	1.57
20	290	1.63



Independent Test Report as Per ISO 12500-1

Filter element:		M50Y		
Element		002		
Standard parameters and measuring results				
Measuring parameters	unit	standard	Test	
Calendar date of test				28./29.09.10
Inlet temperature	°C	20 ± 5	18.6 ± 0.5	
Inlet pressure	bar (e)	7	7	
Ambient temperature	°C	20 ± 5	17.5 ± 0.5	
Inlet dew point	°C	< 10 °C	0 - 4	
Main flow through the test filter	m³/h		50	
Partial flow	m³/h		5.1	
Time of conditioning	h		20.38	
Measuring time	h		2.75	
Inlet oil concentration at conditioning	mg/m³		23 ± 1	
Inlet oil concentration at test	mg/m³	10 ± 10%	10 ± 1	
Residual oil concentration	mg/m³		0.01	
Pressure drop filter element	mbar		183	
Remarks	mouth of probe oil-free			
Test carried out by				
Signature				

Mikropor M50Y-2 at 50 m³/h ANR - 7 bar(e)
28.-29.09.10



Zero Clearance

A major innovation for servicing the zero clearance design gives a quicker, easier, simpler filter change, with no need for any specialist tools.

Anodising

Anodising provides supreme corrosion resistance. Anodised surface treatment is proven to be better than other surface treatment methods such as Alchrome coating. Contact Mikropor to get Comparison Test results between competitor filters with Alchrome coating and Mikropor Filters with Anodising treatment.



With Anodising

Without Anodising

Technical Specifications

Model	Connection Size			Flow Rate		Max. Working Pressure (bar)	Element Model	Housing Dimensions (mm)				
				(m ³ /h)	(cfm)			A	B	C	D	E
GO20	-	1/4"	-	20	12	20	MO20	75	45	193	175	7
GO25	-	3/8"	-	40	24	20	MO40	75	45	193	175	7
GO40	1/4"	3/8"	1/2"	25	15	20	MO25	102	45	214.5	192.5	7
GO50	1/4"	3/8"	1/2"	50	30	20	MO50	102	45	214.5	192.5	7
GO100	3/8"	1/2"	-	100	58	20	MO100	102	45	252.5	230.5	7
GO150	1/2"	3/4"	1"	150	88	20	MO150	123	45	297.5	270.5	8
GO200	3/4"	1"	-	200	117	20	MO200	123	45	361.5	334.5	8
GO250	3/4"	1"	-	250	147	20	MO250	123	45	401.5	374.5	8
GO300	1"	1 1/4"	1 1/2"	300	176	20	MO300	123	45	458	422.5	8
GO500	1 1/4"	1 1/2"	-	500	294	20	MO500	123	45	488	452.5	8
GO600	1 1/4"	1 1/2"	-	600	353	20	MO600	123	45	533	497.5	9
GO851	1 1/4"	1 1/2"	2"	851	500	20	MO851	160	45	622.5	581	9
GO1210	2"	-	-	1210	712	20	MO1210	160	45	692.5	651	9
GO1520	2"	2 1/2"	3"	1520	930	20	MO1520	194	45	725.5	669	10
GO1820	2 1/2"	3"	-	1820	1140	20	MO1820	194	45	865	808	10
GO2220	3"	-	-	2220	1380	20	MO2220	194	45	919.5	863	11
GO2700	3"	-	-	2700	1541	20	MO2700	194	45	1063.5	1007	11

Specifications	Pre Filtering	General Purpose	Oil Removal	Activated Carbon	Indicator Type
Grade	P	X	Y	A	Gauge with or without electrical contact
Particle Removal (Micron)	5	1	0.01	0.01	Drain Type
Max. Oil Carryover at 21°C (mg/m ³)	5	0.5	0.01	0.003	
Max. Working Temperature (°C)	80	80	80	25	External Float Type
Initial Pressure Loss (mbar)	40	80	100	80	Zero-Loss Drain
Pressure Loss for Element Change (mbar)	700	700	700	700	Manual
Element Color Mode	White	White	White	Metal SS	

Notes

- 1) Grade A must not operate in oil saturated conditions.
- 2) Grade A elements should be replaced periodically to suit the applications but must be changed at least every six months.
- 3) Grade A will not remove certain gases including carbon monoxide and carbon dioxide. Please refer to works if in doubt.
- 4) Flow rates are based on a 7 bar operating pressure, for flows at other pressures use correction factor given above.
- 5) All filters are suitable for use with mineral and synthetic oils.
- 6) Gauge type pressure indicators are fitted to models GO25 to GO2700 as standard.
- 7) All filters are in conformity with the Pressure Equipment Directive (97/23/EC).

Ordering

The complete filter model number contains the size and grade, example - 1" general purpose filter model GO250MX with replacement filter element model MO250X. 250 Represent 250 m³/h capacity and X represents the general purpose element.

GON Series

Mikropor, which constantly develops products beyond expectations and needs, has recently begun manufacturing the brand new GON Series Industrial Air Filters for compressed air users to acquire high efficiency filtration experience at the lowest pressure drops.

The new GON Series have more port sizes and offer a reliable performance by minimizing airborne contamination in Compressed Air Systems to the maximum possible extent. With the GON Series, the compressed air users will have the opportunity to replace the inner element and assemble the filter in any compressed air unit extremely easily by means of an innovative design concept which basically puts its unique **"Zero Clearance"** feature forward.

The GON Series are incredibly economical and also manufactured according to **ISO 8573** standards along with its eligibility for PED due to their sustainable and durable structure which is formed up with aluminium construction.

Features

- 35 m³/h- 1200 m³/h air flow range
- NPT/BSP pipe sizes ranging from 1/4 "to 4"
- Aluminium construction without any pores
- **Options:**
 - "Standard Drain" having 1/2" connection size or
 - "Drainless" having 1/2 connection size with adapter.
- Elegantly designed connection clips and wall apparatus
- Production in accordance with ISO8573
- Zero Clearance
- Anodising
- Lock System Indicator

GON-HC Series

In Addition to GON Series, Mikropor has also developed the GON-HC Series in order to respond to high capacity air pressure needs.

High capacity GON-HC Series Filters are designed to increase the capacity of air filters used in compressed air systems. Thus, the utilization of compressed air volume can be easily pushed up to 5400 m³/h.

Compressed air users will be able to install GON-HC Series in their systems without any need for ASME Standards eligibility requirements.



14 Models Between
35 m³/h - 1200 m³/h



6 Models Between
1550 m³/h - 5400 m³/h

Features

- 1550 m³/h- 5400 m³/h air flow range
- NPT/BSP pipe and DN Flange sizes ranging from ¼ to 4
- Aluminium construction without any pores
- **Options:**
 - "Standard Drain" having ½ connection size or
 - "Drainless" having ½ connection size with adapter.
- Elegantly designed connection clips and wall apparatus
- Production in accordance with ISO8573
- Zero Clearance
- Anodising
- Lock System Indicator

GON Series Advantages

- Low initial investment costs
- Low maintenance costs
- Compact design
- Easy to use and install
- High performance
- Third party tested



Purity Class	ISO 8573.1: 2010 Compressed Air Quality Standard							
	Solid Particulate					Water		Oil
	Max. number of Particles per m ³			Particle Size (micron)	Concentration (mg/m ³)	Vapor Pressure Dew Point	Liquid (g/m ³)	Total Oil (Aerosol, Liquid v Vapor) (mg/m ³)
	0.1-0.5 micron	0.5-1 micron	1-5 micron					
0	As specified and determined by equipment user and supplier							
1	≤20000	≤400	≤10	-	-	≤-70°C	-	≤0.01
2	≤400000	≤6000	≤100	-	-	≤-40°C	-	≤0.1
3	-	≤900000	≤1000	-	-	≤-20°C	-	≤1
4	-	-	≤10000	-	-	≤+3°C	-	≤5
5	-	-	≤100000	-	-	≤+7°C	-	-
6	-	-	-	5	5	≤+10°C	-	-
7	-	-	-	40	10	-	0.5	-
8	-	-	-	-	-	-	5	-
9	-	-	-	-	-	-	10	-

for Solid Particles	for Water	for Oil
Element Type P - Class 3	Mikropor Refrigerated Air Dryers are Class 4	Element Type P - Class 3
Element Type X - Class 2		Element Type X - Class 2
Element Type Y - Class 1	Mikropor Desiccant Air Dryers are Class 1 and 2	Element Type Y - Class 1
Element Type A - N/A		Element Type A - Class 1 (when used with Y)

Element Features

Mikropor offers Superior protection - from 1 micron to 0,01 micron. Durable element construction and efficient drain layer ensures continued performance with optimal element change intervals. Elements are also easy to replace with the plastic handles.

Mikropor Elements Have Been Designed for Easy Handling

- 1- Depth media construction offers higher coalescing performance.
- 2- Supreme collapse resistance due to usage of fluted stainless tube, providing strength against pressure drops while improving the performance by passing air diagonally through the element.
- 3- PVC impregnated foam favors water/oil drainage.



Element Advantages

- High energy efficiency due to low pressure drops
- Durability under high pressure conditions (20 bar)
- 4 different ranges of filtration efficiency which offers an opportunity to operate at various different filtration applications.
- High filtration capacity, which can target the smallest contaminants (0.01 micron and above) at 20 bar pressure.
- Minimization of valuable compressed air loss with Zero-Loss Drain option
- Third Party tested

Head Clamping

Head Clamping provides serial connection of filters without any extra piping, connection clamps are used for connecting multiple filters to each other. Wall mounting clamps are used to connect the filters to the wall easily.

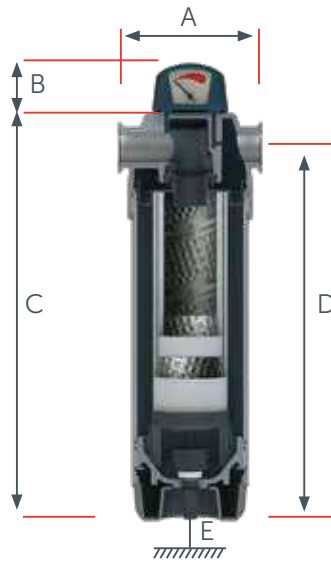
Drainage Ribs

Drainage Ribs favors the humidity flow.

Correction Factor

For maximum flow rate of the filter model, multiply model flow rate shown in the below table by the correction factor corresponding to the working pressure.

Operating Pressure (bar)	PSI	Correction Factor
3	44	0.71
5	73	0.87
7	100	1
9	131	1.12
11	160	1.22
13	189	1.32
15	218	1.44
16	232	1.50
18	261	1.57
20	290	1.63



Zero Clearance

A major innovation for servicing the zero clearance design gives a quicker, easier, simpler filter change, with no need for any special tools.

Anodising

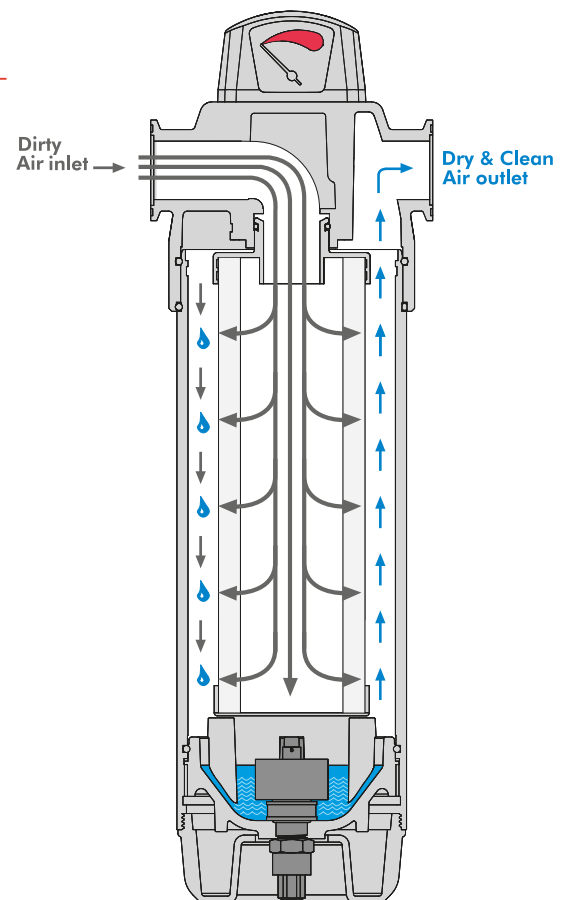
Anodising provides supreme corrosion resistance. Anodised surface treatment is proven to be better than other surface treatment methods such as Alocrome coating. Contact Mikropor to get comparison test results between competitor filters with Alocrome coating and Mikropor filters with anodising treatment.

Options

- Drains: Automatic / Manuel / Zero Loss
- Indicator or No indicator
- O-rings: Viton

Alternative Filters

- "S" Grade: Sterile Filter
- "H" Grade: Hopcalite Filter
- "T" Grade: 25 micron Coarse Dust Filter
- "HT" Grade: High Temperature Filters



The reliability of GON Series is guaranteed by the results obtained from "Third Party Tests" which is renowned worldwide in the Compressed Air Industry.

Technical Specifications

Model	Connection Size			Flow Rate		Max. Working Pressure (bar)	Element Model	Housing Dimensions (mm)				
				(m ³ /h)	(cfm)			A	B	C	D	E
GON-35	1/4"	3/8"	1/2"	35	21	20	MON35	90	36,5	214	192	19
GON-55	1/4"	3/8"	1/2"	55	33	20	MON55	90	36,5	251,5	230	19
GON-70	3/8"	1/2"	-	70	42	20	MON70	128	45	273	249,5	32
GON-100	3/8"	1/2"	-	100	60	20	MON100	128	45	302,5	279	32
GON-125	3/8"	1/2"	-	125	75	20	MON125	128	45	343	319,5	32
GON-150	3/4"	1"	-	150	90	20	MON150	140	45	369	334,5	31
GON-225	3/4"	1"	-	225	135	20	MON225	140	45	398	364,5	31
GON-300	1 1/4"	1 1/2"	-	300	180	20	MON300	140	45	474	432	31
GON-400	1 1/4"	1 1/2"	-	400	240	20	MON400	140	45	564	522	31
GON-500	1 1/4"	1 1/2"	2"	500	300	20	MON500	151	45	511	464,5	25
GON-600	1 1/2"	1 1/2"	2"	600	360	20	MON600	151	45	626	579,5	25
GON-800	1 1/4"	1 1/2"	2"	800	480	20	MON800	151	45	696	649,5	25
GON-1000	1 1/4"	1 1/2"	2"	1000	600	20	MON1000	151	45	851	804,5	25
GON-1200	1 1/4"	1 1/2"	2"	1200	720	20	MON1200	151	45	976	929,5	25
GON-HC-1550	2 1/2"	3"	-	1550	930	20	MONHC1550	240	45	707	659,5	25
GON-HC-2000	2 1/2"	3"	-	2000	1200	20	MONHC2000	240	45	862	814,5	25
GON-HC-2700	2 1/2"	3"	-	2700	1620	20	MONHC2700	240	45	987	939,5	25
GO-HC-3400	DN100	-	-	3400	2040	16	MO3400	360	45	871	810	30
GO-HC-4500	DN100	-	-	4500	2700	16	MO4500	360	45	926	865	30
GO-HC-5400	DN100	-	-	5400	3240	16	MO5400	360	45	1070	1009	30

Specifications	Pre Filtering	General Purpose	Oil Removal	Activated Carbon	Indicator Type
Grade	P	X	Y	A	Differential Pressure Gauge
Particle Removal (Micron)	5	1	0.01	0.01	Drain Type
Max. Oil Carryover at 21°C (mg/m ³)	5	0.5	0.01	0.003	
Max. Recommended Temperature (°C)	80	80	80	50	Electro-Adjustable
Initial Pressure Loss (mbar)	40	80	100	80	External Float Type
Pressure Loss for Element Change (mbar)	700	700	700	700	Zero-Loss Drain
Element Color Code	White	White	White	Metal SS	Manual

For 0,003 mg/m³ quality oil in the air, the inlet temperature should be 25°C.

Notes

- 1) Given flows are at 7 barg pressure with reference to 20°C and 1 bar atmospheric air suction as per ISO 7183. In order to calculate the flow capacities at other pressures please refer to the correction factor table on page 9.
- 2) Grade A must not operate in oil saturated conditions.
- 3) Grades P, X and Y elements need to be replaced periodically to suit applications but must be changed at least every 8000 hours.
- 4) Grade A elements should be replaced periodically to suit the applications but must be changed at least every six months.
- 5) Grade A will not remove certain gases including carbon monoxide and carbon dioxide.
- 6) Flow rates are based on a 7 bar operating pressure, for flows at other pressures use correction factor given above.
- 7) All filters are suitable for use with mineral and synthetic oils.
- 8) Gauge type pressure indicators are fitted to all models as standard except Activated Carbon Filters.
- 9) All filters are in conformity with the 2014/68/EU Pressure Equipment Directive.

Ordering

The complete filter model number contains the size and grade, example – GON-150-1-X represents 150 m³/h capacity and 1" connection general purpose filter model with replacement filter element model X.



Features

- Elements are assembled with a tie rod system
- Two external float drains for maximum drainage
- Unique design for pre-separation zone
- Strong welded design
- CE and ASME tanks available
- Design for easy element change from top flange

External Float Drain

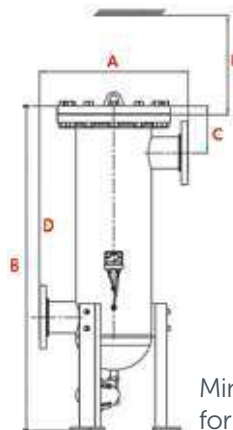
Mikropor external drain is designed to remove liquid condensation from collection points in a Compressed Air System.

Durable epoxy powder-coat finish and corrosion resistant internal anodised coating for longer service life.

Correction Factor

For maximum flow rate, multiply model flow rate show in the above table by the correction factor corresponding to the working pressure.

Operating Pressure (bar)	PSI	Correction Factor
1	15	0.5
3	44	0.71
5	73	0.87
7	100	1
9	131	1.12
11	160	1.22
13	189	1.32
14	200	1.38



Minimum clearance for element change



Minimum clearance for element change

High Performance Elements Inside



Technical Specifications

Model	Drain Port Size	Inlet/Outlet Port Size	Flow Rate		Max. Working Pressure (bar)	Element Model	Number of Elements	Housing Dimensions (mm)				
			(m ³ /h)	(cfm)				A	B	C	D	E
F2500	1/2"	DN80	2500	1470	14	M1200	2	450	1287	277	747	650
F3200	1/2"	DN100	3200	1880	14	M1200	3	450	1317	277	767	650
F4300	1/2"	DN100	4300	2530	14	M1200	4	530	1344	279	769	650
F6500	1/2"	DN150	6500	3825	14	M1200	6	580	1425	331	796	650
F8500	1/2"	DN150	8500	5000	14	M1200	8	650	1439	333	798	650
F11000	1/2"	DN200	11000	6470	14	M1200	10	750	1504	365	825	650
F14000	1/2"	DN200	14000	8235	14	M1200	14	800	1545	383	833	650
F17000	1/2"	DN250	17000	10000	14	M1200	16	850	1583	417	862	650
F21000	1/2"	DN300	21000	12350	14	M1200	17	850	1680	447	887	650
F25500	1/2"	DN350	25500	15000	14	M1200	23	850	1778	487	917	650
F30000	1/2"	DN350	30000	17650	14	M1200	28	850	1778	487	917	650

Given flows are at 7 barg pressure with reference to 20°C and 1 bar atmospheric air suction as per ISO7183.

Specifications	Pre Filtering	General Purpose	Oil Removal	Activated Carbon	Drain Type
Grade	P	X	Y	A	Electro - Adjustable
Particle Removal (Micron)	5	1	0.01	0.01	External Float Type
Max. Oil Carryover at 21°C (mg/m ³)	5	0.5	0.01	0.003	Zero-loss Drain
Max. Working Temperature (°C)	80	80	80	50	Manual
Initial Pressure Loss (mbar)	40	80	100	80	
Pressure Loss for Element Change (mbar)	700	700	700	700	
Element Color Mode	White	White	White	Metal SS	

For 0,003mg/m³ quality oil in the air, the inlet temperature should be 25°C.

Notes

- Grade A must not operate in oil saturated conditions.
- Grade A elements should be replaced periodically to suit the applications but must be changed at least every six months.
- Grade A will not remove certain gases including carbon monoxide and carbon dioxide. Please refer to works if in doubt.
- Flow rates are based on a 7 bar operating pressure, for flows at other pressures use correction factor given above.
- All filters are suitable for use with mineral and synthetic oils.
- Other standards for flanged connections are available.
- Direction of air flow is inside to out, through filter element.

Ordering

The complete filter model number contains the size and grade, Example - pipe size NW100 oil removal filter with model filter F3200MY replacement filter element model M1200Y.

▶ ELM SERIES MIST ELIMINATOR AIR FILTERS

FILTRATION AND SEPARATION ◀

- Ultra low pressure drop reduces energy costs
- Positive gasket seals eliminate media bypass
- Filter change out differential 170 mbar (2.5 psi)
- True Air/Oil Separator
- Long service life

Applications Include

- Capturing oil fog, mist, or smoke from exhaust and pressure unloading vents on oil flooded compressors, vacuum pumps and blowers
- Any application requiring Low Delta P coalescing of large air volumes
- Vacuum Freeze Drying
- Vacuum Out-Gassing and Vacuum Coating
- Food Processing
- Nailers/Staplers
- Industrial Vacuum Processes
- Cement & Paper Processing

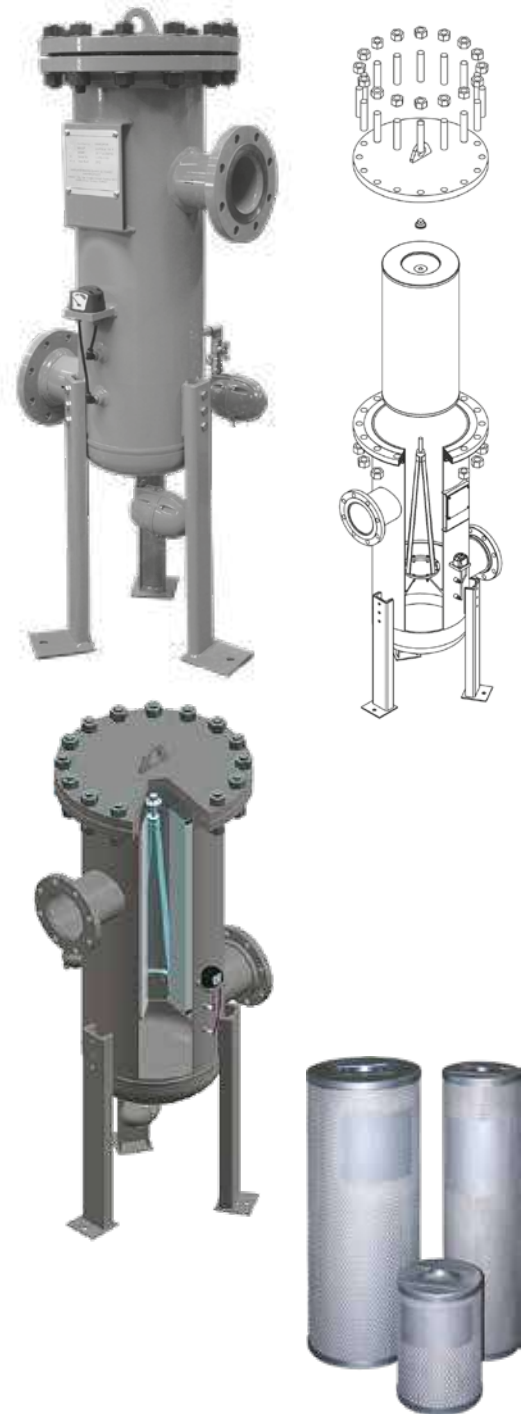
Design

Mist Eliminators are designed to meet the demand for:

- Efficient removal of oil-mist carryover from piston or oil flooded rotary compressors
- Long service life
- Protection from oil slugs or compressor Air/Oil separator failure

Features

- Very low pressure drop
- High oil removal efficiency
- Easy field changing
- Positive sealing O-rings
- Temperature (continuous) 4°C (40°F) min. 80°C (176°F) max.
- Auto Float Drain is standard
- Multiple drain style options available
- Pressure rating of 14 bar (200 psi)
- Removal of particles down to 0.01 micron including coalesced liquid water and oil, providing a maximum remaining oil aerosol content of 0.01 ppm
- Increased surface area in a given volume allows low velocity separation of ultra fine oil mist
- Elements are grounded to canister, minimizing static electricity problems

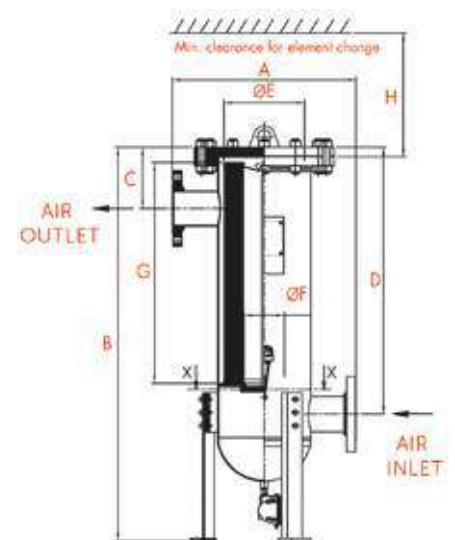
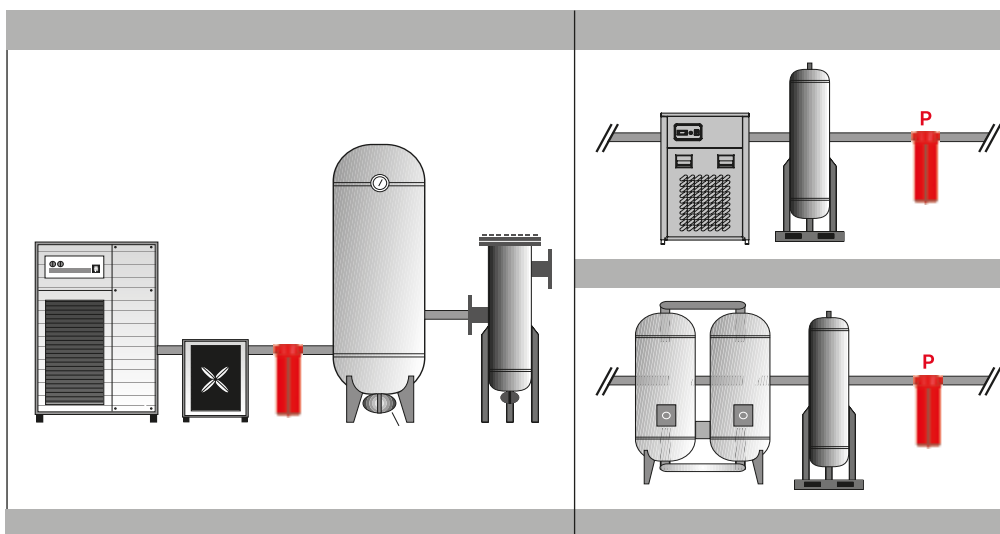


Correction Factor

For maximum flow rate, multiply model flow rate show in the above table by the correction factor corresponding to the working pressure.

Operating Pressure (bar)	PSI	Correction Factor
1	15	0.5
3	44	0.71
5	73	0.87
7	100	1
9	131	1.12
11	160	1.22
13	189	1.32
14	200	1.38

Drain Type
Electro - Adjustable
External Float Type
Zero-loss Drain
Manual



Technical Specifications

Model	Drain Port Size	Inlet/Outlet Port Size	Flow Rate		Max. Working Pressure (bar)	Housing Dimensions (mm)							
			(m ³ /h)	(cfm)		A	B	C	D	ØE	ØF	G	H
ELM-150	1/2"	DN50	255	150	14	500	1003	209	459	203	103	305	330
ELM-300	1/2"	DN50	510	300	14	500	1105	209	559	203	103	407	435
ELM-600	1/2"	DN50	1020	600	14	500	1461	209	916	203	103	762	790
ELM-800	1/2"	DN80	1360	800	14	500	1655	279	1084	203	103	915	950
ELM-1200	1/2"	DN80	2040	1200	14	500	1520	281	931	254	103	762	790
ELM-1600	1/2"	DN80	2720	1600	14	500	1671	281	1086	254	103	915	950
ELM-2100	1/2"	DN100	3570	2100	14	500	1575	335	953	300	129	762	790
ELM-2750	1/2"	DN100	4675	2750	14	500	1726	335	1100	300	129	915	950
ELM-4200	1/2"	DN150	7140	4200	14	500	1670	393	983	365	181	762	790
ELM-6000	1/2"	DN150	10200	6000	14	500	1925	393	1238	365	181	950	1045
ELM-8000	1/2"	DN200	13600	8000	14	500	2020	417	1277	386	233	1016	1045
ELM-10000	1/2"	DN250	17000	10000	14	500	2118	417	1307	407	337	1016	1045
ELM-12000	1/2"	DN300	20400	12000	14	500	2688	497	1847	437	337	1524	1550

Given flows are at 7 barg pressure with reference to 20°C and 1 bar atmospheric air suction as per ISO7183.

Oil mist contaminates the air supply and can ruin plant equipment. Removing oil-mist, and particles will protect your plant equipment and improve your product quality. To eliminate these problems Mikropor recommends our G-ELM Mist Eliminator Air Filters.

The G-ELM series is designed to remove oil mist from compressed air by using a coalescing filter. When wet/oily compressed air enters the eliminator, the inner layer of the filter captures the oil and oil droplets that are produced. Oil droplets accumulate on the filter outer surface and, as these droplets increase in size, they fall and collect at the bottom of the filter where they are then drained from the system.

Standard Features

- Low-pressure drop
- High oil removal efficiency
- Removal of coalesced liquid water and oil down to 0.01 micron, providing a maximum remaining oil aerosol content of 0.01 ppm
- Auto Float Drain
- Oil indicator
- Long service life
- Customer-friendly changing procedure



Technical Specifications

Models	Max. Remaining Oil Content	Flow Rate (Nm ³ /h@ 7barg)	Inlet-Outlet Flange Size	Drain Connection	Lenght (mm)	Width (mm)	Height (mm)
G-100 ELM	0,01 ppm	35	1/2"	1/8"	102	86,8	257,5
G-150 ELM	0,01 ppm	45	1/2"	1/8"	123	108,5	305
G-200 ELM	0,01 ppm	50	1"	1/8"	123	108,5	369
G-250 ELM	0,01 ppm	70	1"	1/8"	123	108,5	409
G-300 ELM	0,01 ppm	85	1 1/2"	1/8"	123	108,5	463
G-500 ELM	0,01 ppm	100	1 1/2"	1/8"	123	108,5	493
G-600 ELM	0,01 ppm	130	1 1/2"	1/8"	123	108,5	538
G-851 ELM	0,01 ppm	170	1 1/2"	1/8"	160	138	625,5
G-1210 ELM	0,01 ppm	200	2"	1/8"	160	138	695,5

Max. Operating Pressure (barg)	16
Max. Working Temp. (°C)	80
Min. Operating Temp. (°C)	4

Aerosol form of oil and oil mist decrease the quality of compressed air and can damage pneumatic equipment. There are filters available to remove aerosol form of oil. However, vapour oil can not be separated using these types of filters. Mikropor's patented Carbolescer can remove both aerosol and vapour forms of oil.

Carbolescer is a combination of plated coalescing media, carbon layer, and wrapped particulate media. Aerosol form of oil is eliminated with coalescing action in the plated media. When oily compressed air enters the unit, oil droplets accumulate and fall down through the filter media. Collected liquid oil is drained from the automated drain. With pleated coalescing media, 0,01 micron size oil contaminants can be removed. In addition to the pleated media, the activated carbon layer adsorbs the oil vapour. Oil vapour adheres physically through the active carbon granules and, as a consequence of this, the remaining oil content can be decreased to 0,003 ppm. Lastly, the layer of particulate media helps to remove carbon dust delivering oil-free compressed air, even from an oil-lubricated compressor.



Standard Features

- Very low-pressure drops
- Maximum remaining oil aerosol content 0,003 ppm
- Equal air distribution
- Long service life
- User friendly changing procedure
- Oil indicator



Operating Pressure (bar)	PSI	Correction Factor
1	15	0.5
3	44	0.71
5	73	0.87
7	100	1
9	131	1.12
11	160	1.22
13	189	1.32
14	200	1.38

Technical Specifications

Models	Max Remaining Oil Aerosol Content (@21°C)	Recommended Flow Rate (Nm ³ /h @7 barg)	Max. Operating Pressure (barg)	Inlet-Outlet Flange Size	Length (mm)	Height (mm)
G-100 ELM-C	0,003 ppm	35	16	1/2"	102	302
G-150 ELM-C	0,003 ppm	45	16	1/2"	123	352,0
G-200 ELM-C	0,003 ppm	50	16	1"	123	412,0
G-250 ELM-C	0,003 ppm	70	16	1"	123	454,0
G-300 ELM-C	0,003 ppm	85	16	1 1/2"	123	507,0
G-500 ELM-C	0,003 ppm	100	16	1 1/2"	123	537,0
G-600 ELM-C	0,003 ppm	130	16	1 1/2"	123	583,0
G-850 ELM-C	0,003 ppm	170	16	1 1/2"	160	668,0
G-1210 ELM-C	0,003 ppm	200	16	2"	160	740,0
ELM-150-C	0,003 ppm	255	14	DN 50	500	1065
ELM-300-C	0,003 ppm	510	14	DN 50	500	1165
ELM-600-C	0,003 ppm	1020	14	DN 50	500	1523
ELM-800-C	0,003 ppm	1360	14	DN 80	500	1743
ELM-1200-C	0,003 ppm	2040	14	DN 80	600	1606
ELM-1600-C	0,003 ppm	2720	14	DN 80	600	1747
ELM-2100-C	0,003 ppm	3570	14	DN 100	700	1651
ELM-2750-C	0,003 ppm	4675	14	DN 100	700	1798
ELM-4200-C	0,003 ppm	7140	14	DN 150	800	1750
ELM-6000-C	0,003 ppm	10200	14	DN 150	800	1997
ELM-8000-C	0,003 ppm	13600	14	DN 200	850	2095
ELM-10000-C	0,003 ppm	17000	14	DN 250	1000	2208
ELM-12000-C	0,003 ppm	20400	14	DN 300	1000	2775

Models	ELM-C	G-ELM-C
Max. Operating Pressure (barg)	14	16
Max. Working Temp. (°C)	80	
Min. Operating Temp. (°C)	4	

High Pressure & High Performance



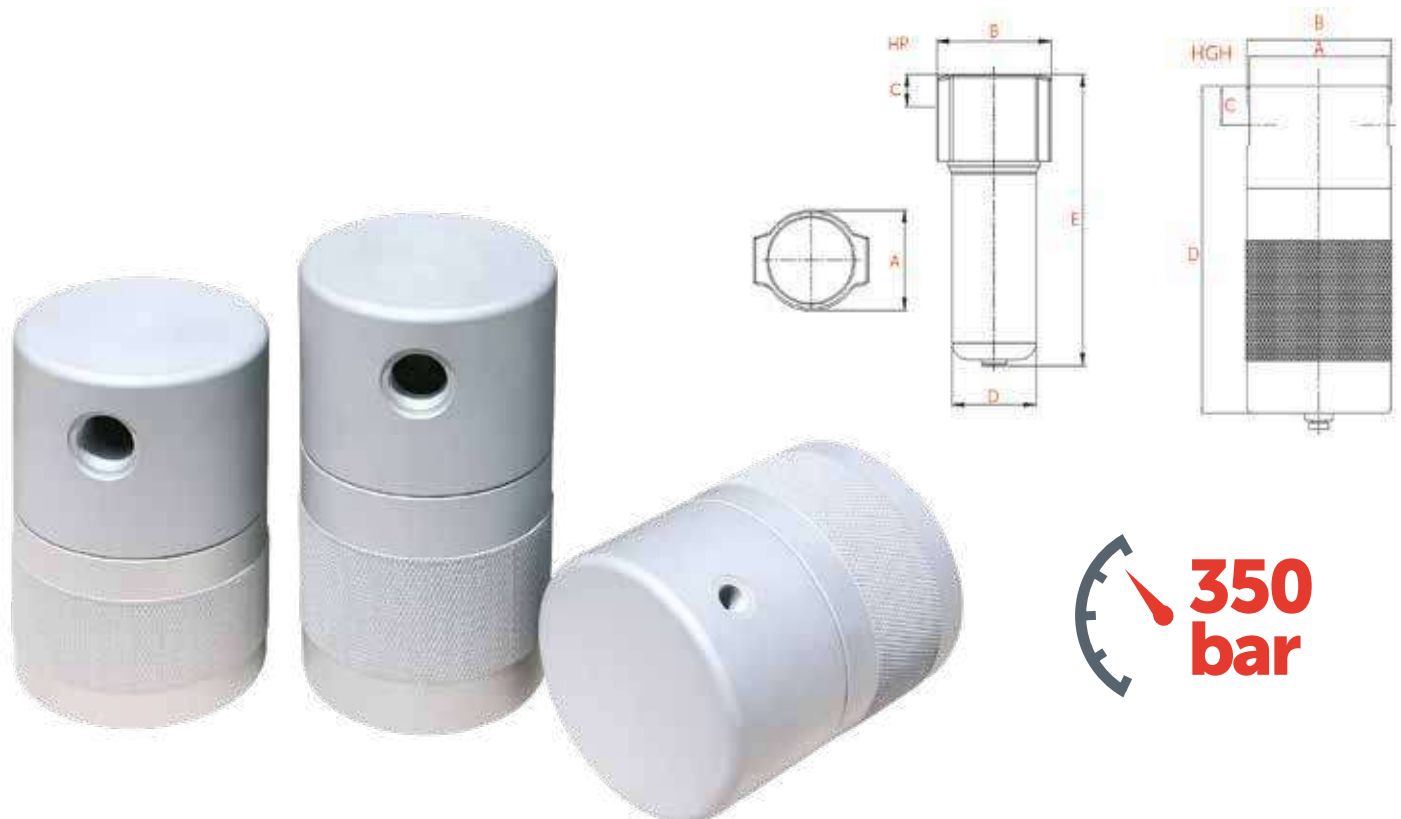
Features

Mikropor manufactures a line of High Performance Compressed Air Filters, Moisture Separators in two different ranges; 50 bar range made of Aluminium. No welding, strong and reliable design.

350 bar range made of Steel. No welding and designed for reliability at very high pressure applications.

Anodised Aluminium Design with High Performance

Mikropor High Pressure Range Compressed Air Filters are NO-weld design. These Filters are built with ample wall thickness and as a result are extremely robust. In-house high pressure test facilities assure the performance. All inner and outer surfaces of 50 bar Aluminium design Filters are Anodised, where 350 bar Carbon Steel design Filters are epoxy electro powder coated.



Technical Specifications

Model	Connection Size	Flow Rate at 50 bar		Max. Working Pressure (bar)	Element Model	Housing Dimensions (mm)				
		(m ³ /h)	(cfm)			A	B	C	D	E
HP100	1/4"	71	42	50	M25	106	119	30	88	201
HP300	1/2"	212	125	50	M50	106	119	30	88	201
HP600	3/4"	425	250	50	M100	106	119	30	88	201
HP850	1"	595	350	50	M150	123	140	39.5	103	357
HP1200	1"	850	500	50	M200	123	140	39.5	103	357
HP1600	1 1/2"	1600	940	50	M250	123	140	39.5	103	357
HP2500	2"	2500	1470	50	M2500	159	179	56	133	380
HP3000	2 1/2"	3000	1765	50	M3000	159	179	56	133	380

Model	Connection Size	Flow Rate at 350 bar		Max. Working Pressure (bar)	Element Model	Housing Dimensions (mm)			
		(m ³ /h)	(cfm)			A	B	C	D
HGH100	1/4"	102	60	350	M25	113.4	115.4	25.75	155
HGH300	1/2"	298	175	350	M50	113.4	115.4	25.75	158.5
HGH600	3/4"	595	350	350	M100	109.4	115.4	32.25	207
HGH850	1"	850	500	350	M150	133	138	37.35	250
HGH1200	1"	1190	700	350	M200	133	138	37.35	314
HGH1600	1 1/2"	2240	1317	350	M250	128	138	44.4	368
HGH2500	2"	3500	2058	350	M2500	145	158	51.5	393
HGH3000	2 1/2"	4200	2470	350	M3000	160	178	57.6	386

Specifications	Pre Filtering	General Purpose	Oil Removal	Activated Carbon	Drain Type
Grade	P	X	Y	A	HP - Manual Brass Drain
Particle Removal (Micron)	5	1	0.01	0.01	HGH - Manual Brass Drain
Max. Oil Carryover at 21°C (mg/m ³)	5	0.5	0.01	0.003	
Max. Working Temperature (°C)	80	80	80	50	
Initial Pressure Loss (mbar)	40	80	100	80	
Pressure Loss for Element Change (mbar)	700	700	700	700	
Element Color Mode	White	White	White	Metal SS	

For 0,003mg/m³ quality oil in the air, the inlet temperature should be 25°C

Notes

- Grade A must not operate in oil saturated conditions.
- Grade A elements should be replaced periodically to suit the applications but must be changed at least every six months.
- Grade A will not remove certain gases including carbon monoxide and carbon dioxide.
- Flow rates are based on 50 bar for HP and 350 bar for HGH filters.
- All filters are suitable for use with mineral and synthetic oils.
- Other standards for flanged connections are available.
- Direction of air flow is inside to out, through filter element.

Ordering

The complete filter model number contains the size and grade, example – GON-150-1-X represents 150 m³/h capacity and 1" connection general purpose filter model with replacement filter element model X.

► MCC SERIES CATALYTIC CONVERTER

FILTRATION AND SEPARATION ◀

Oil-free compressors are seen as the ideal solution for any application that requires oil-free air. For this reason, the majority of compressed air users prefer to install an oil-free compressor in their system.

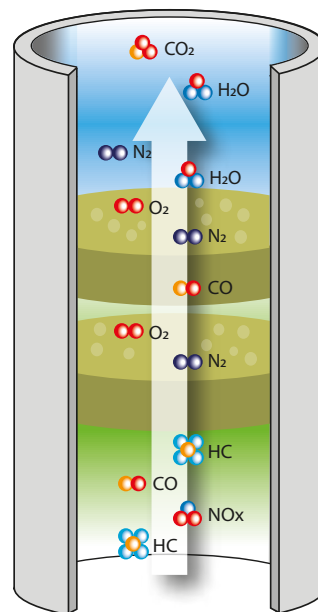
However, oil-free compressors are more costly than their oil lubricated counterparts and do not necessarily deliver truly oil-free compressed air. Like all compressors, oil-free compressors can deliver what they receive from the ambient air. In industrial environments the ambient air typically contains between 0.05 to 0.5 mg/m³ of oil (hydrocarbons). When this atmospheric (ambient) air is compressed to 7 bar, the oil concentration output level of the oil-free compressor increases to between 0.4 and 4 mg/m³. This could not be considered oil-free air and will be a problem for the site if oil-free air is a strict requirement.

Mikropor has a more cost-effective solution to minimise compromises in a compressed air system with the new MCC Catalytic Converter. The MCC eliminates residual oil in compressed air by means of a catalytic reaction between the oil-laden air and the reactant (catalyst).

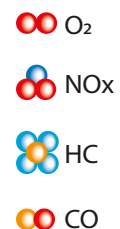
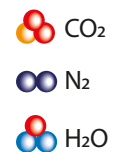
Mikropor's Catalytic Converters use a process of catalytic oxidation to actively transform the oil and hydrocarbons in compressed air and convert them to H₂O and CO₂ by utilizing a special type of catalyst.

Mikropor is delighted to present MCC which can be used as a perfect technical solution to obtain an oil-free compressed air system for a wide variety of industries. MCC Catalytic Converters deliver Class 0 oil-free compressed air in accordance with the ISO 8573-1 International Standard.

Oil content in compressor outlet air is reduced to less than **0.0025 mg/m³** by using heat-reactivated catalyst.



The clean exhaust exits the converter



With the effect of exhaust gases entering the catalyst, oxidation of carbon monoxide (CO) and unburned Hydrocarbons (HC) and reduction of Nitrogen oxides (NO_x) occurs



Advantages

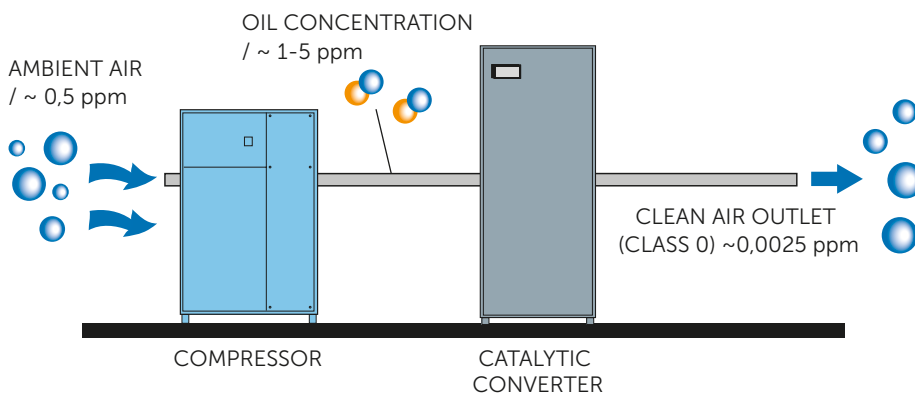
Mikropor’s MCC Catalytic Converters have less investment & operating cost compared to oil-free compressors and provide;

- Cost reductions (By investing in an oil-flooded compressor with an MCC rather than using an oil-free compressor)
- Maintenance cost reductions
- Extended filter change periods
- Eliminated additional costs for separating oil condensate
- Avoidance of costly production standby and shutdown.
- Consistent air quality which will remain at the same level for the lifetime of the catalyst
- Extended service life of downstream equipment
- Reduced energy consumption (maximum 0.01 kWh/m³ at maximum load)

Technical Structure Of MCC Series Catalytic Converter



- | | |
|--|--------------------------------------|
| 1. Compressed Air Containing Oil From Compressor | 7. Catalyst (Inside the Tank) |
| 2. Mist Eliminator | 8. Oil Indicator |
| 3. Particulate Filter | 9. Minimum Pressure Closing Valve |
| 4. Heat Exchanger | 10. Electrical Enclosure |
| 5. Converter Vessel | 11. Oil-Free Compressed Air to Dryer |
| 6. Heater (Inside the Tank) | 12. Controller User Screen |



Basic Working Principle of MCC Series Catalytic Converter

At the first stage, specially designed catalyst in MCC vessels is heated up to a certain temperature. The oily inlet air gets resolved into hydrocarbons when entering the heated up container. These hydrocarbons are converted into water and carbon dioxide by reacting with oxygen molecules on the catalyst surface. Thereafter, completely oil free Class 0 compressed air gets cooled by a heat exchanger and delivered right into the system without the need for any additional treatment.



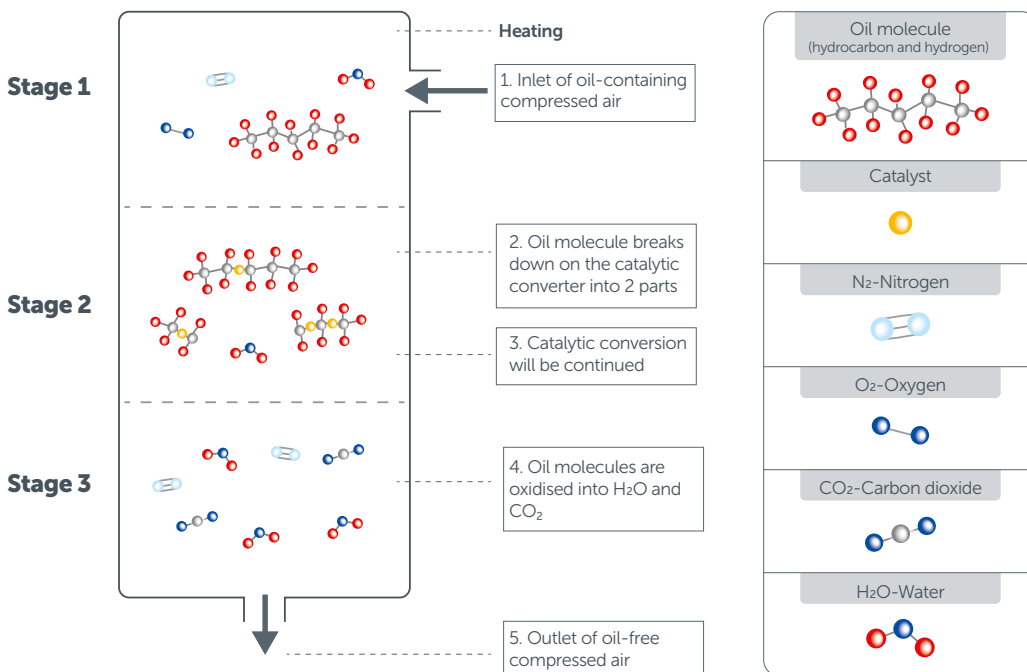
Standard Oil Indicator

Most users would like to be sure that they deliver oil free compressed air to their processes. The oil indicator which is standard on MCC Catalytic Converters prove that there is no oil in the compressed air after the MCC Catalytic Converter.



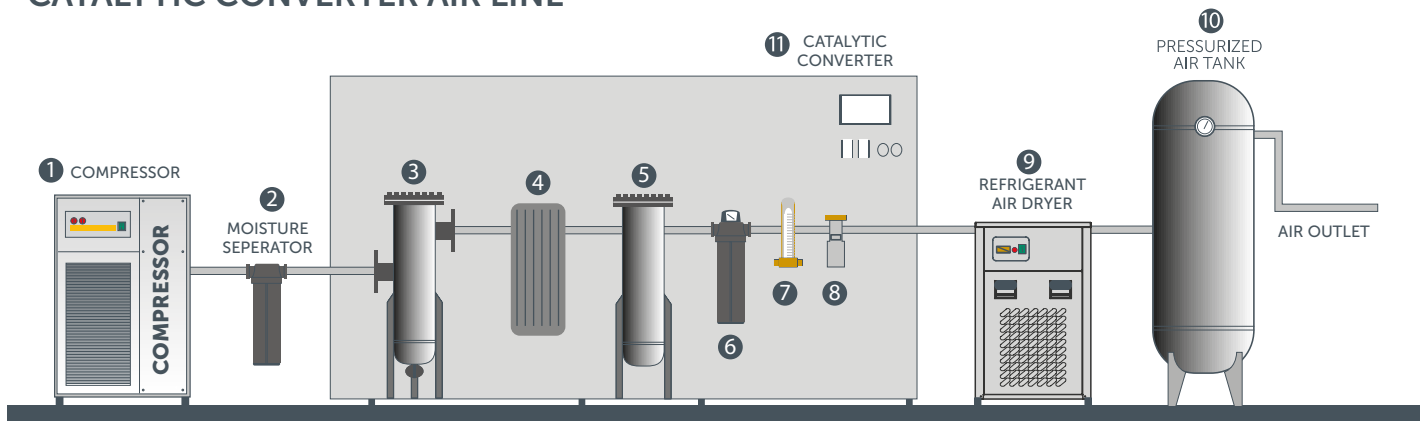
MOI Mikropor Oil Sensor

Optionally, MOI Sensor is supplied along with the MCC Series Catalytic Converters. MOI Sensor reads any oil in the air and shows a digital oil level on the screen. The alarm level can be set to stop entire system and protect the process in case there is any oil in the air.



Components Needed to Design an Oil-Free Class 0 Compressed Air System

CATALYTIC CONVERTER AIR LINE



- 1- Compressor
- 2- Moisture Separator (Standard)
- 3- Carbolescer
- 4- Heat Exchanger
- 5- Catalyst Tank
- 6- Compressed Air Filter (P) (Standard)
- 7- Oil Indicator (Standard)
- 8- Min. Pressure Valve (Standard)
- 9- Refrigerant Air Dryer
- 10- Pressurized Air Tank
- 11- Catalytic Converter

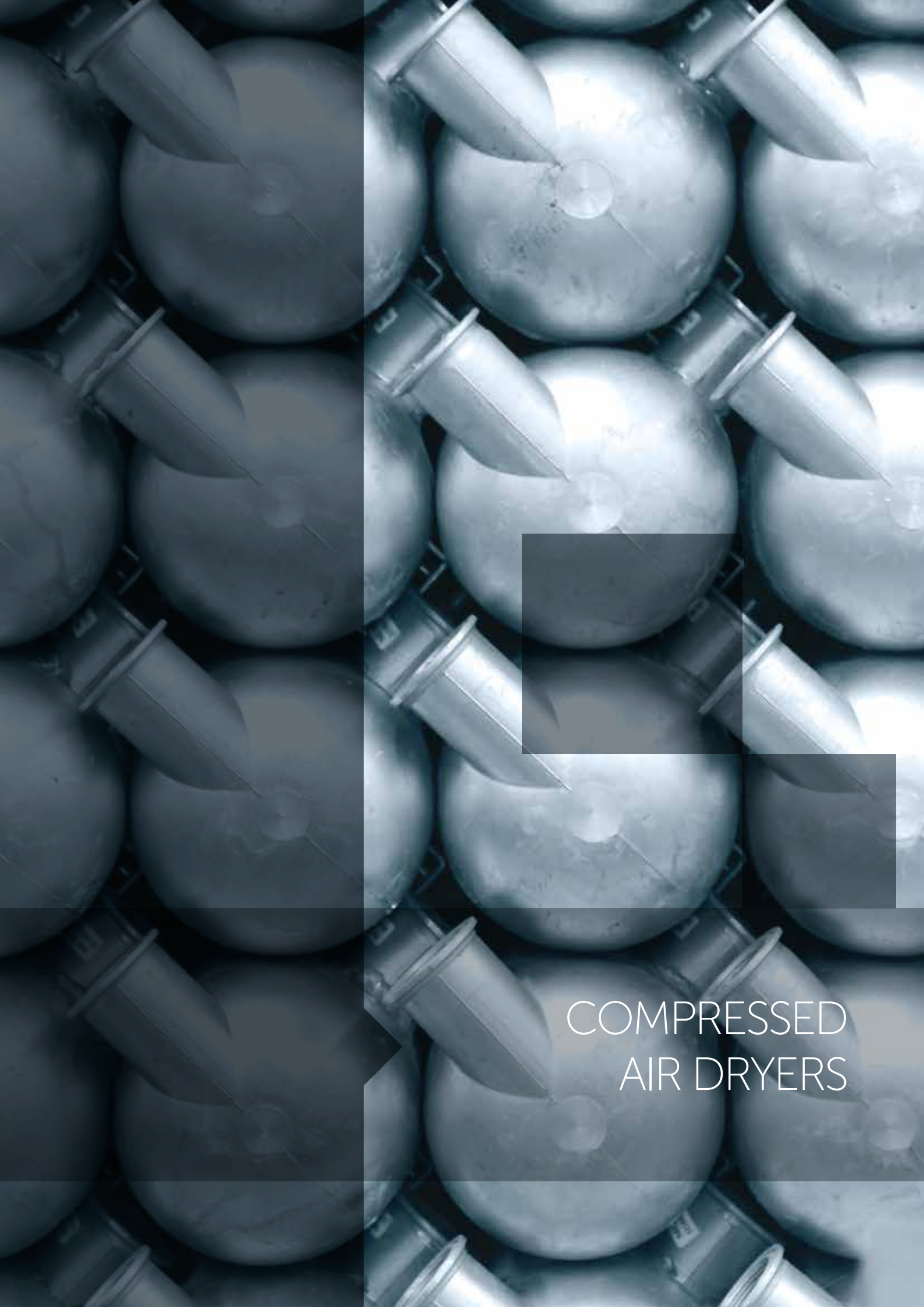
Technical Specifications

Model	Air Capacity (Nm ³ /min)	Connection Size	Max. Working Pressure (bar)	Pressure Drop (mbar)	Voltage	Total Installed Power (kw)	Fuse Amp.	Specific Power Consumption (kWh/m ³)
MCC 11	1	1/2"	16	≤ 400	230/1/50-60	1,2	16	0,009
MCC 22	2	3/4"	16	≤ 400	230/1/50-60	2,5	16	0,009
MCC 55	5	1 1/4"	16	≤ 400	400/3/50-60	5	20	0,007
MCC 75	7	1 1/2"	16	≤ 400	400/3/50-60	5	20	0,006
MCC 110	10	1 1/2"	16	≤ 400	400/3/50-60	10	20	0,005
MCC 160	15	2"	16	≤ 400	400/3/50-60	10	20	0,005
MCC 210	20	2 1/2"	16	≤ 400	400/3/50-60	15	50	0,005
MCC 330	30	2 1/2"	16	≤ 400	400/3/50-60	21	50	0,005
MCC 430	43	DN 80	16	≤ 400	400/3/50-60	28	50	0,005
MCC 650	65	DN 100	16	≤ 400	400/3/50-60	28	50	0,005

03

COMPRESSED AIR DRYERS

MKE SERIES NON CYCLING INTEGRATED FILTRATION	44
ICE SERIES ICE CUBE / STATIC	50
MH SERIES HIGH TEMPERATURE	51
MCY SERIES THERMAL MASS/CYCLING INTEGRATED FILTRATION	52
MK-DS SERIES DIGITAL SCROLL INTEGRATED FILTRATION	58
MK-HP SERIES HIGH PRESSURE	62
ISO STANDARDS	64
MMD SERIES DESICCANT COMPRESSED AIR DRYERS	66
MMD-VP SERIES DESICCANT COMPRESSED AIR DRYERS	68
MDA SERIES HEATLESS DESICCANT	72
MBP SERIES HEATED DESICCANT	75



COMPRESSED
AIR DRYERS