

# AAF SERIES

## ALUMINIUM COMPRESSED AIR FILTERS

operating pressure	<b>16 bar</b>
volume flow rate	<b>15 to 120 Nm<sup>3</sup>/h</b>
connections	<b>1/8" to 3/4"</b>
operating temp. range	<b>1,5 to 65 °C</b>
standard colour	<b>RAL 5012</b>

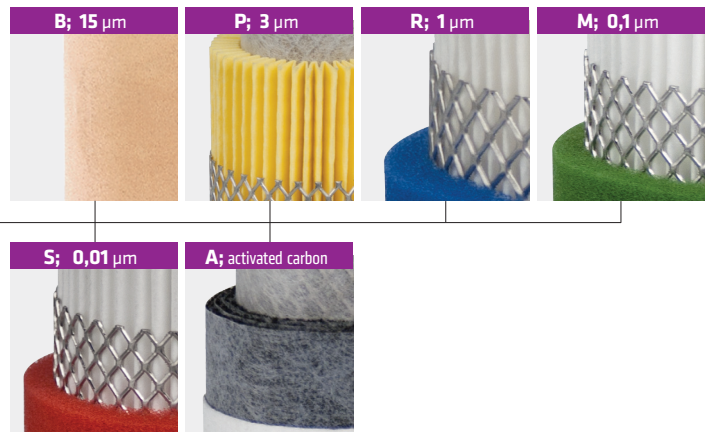
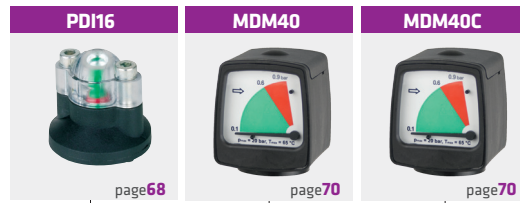
### APPLICATIONS

- general industrial applications
- automotive
- electronics
- food and beverage
- chemical
- petrochemical
- plastics
- paint

### DESCRIPTION

AAF filter housings are designed for high efficient removal of solid particles, water, oil aerosols, hydrocarbons, odour and vapours from compressed air<sup>(1)</sup> systems. To meet the required compressed air quality appropriate filter element (P, R, M, S, A) must be installed into filter housing.

<sup>(1)</sup> For any other technical gas please contact producer or your local distributor.





TECHNICAL DATA										FILTER ELEMENTS						
Filter housing size	Pipe size	Max.oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass	P prefilter	R prefilter	M microfilter	S microfilter	A activated carbon	CKL-AAF	
	inch		[bar/psi]	Nm³/h	scfm	A	B	C		D	3 µm	1 µm	0,1 µm	0,01 µm		activated carbon
AAF 0016 <sup>2)</sup>	1/8"	16/232	15	9	110	54	17	50	0,25	03528 P	03528 R	03528 M	03528 S	03528 A	CKL-AAF 0016	
AAF 0026	1/4"	16/232	30	17	153	72	19	50	0,5	03844 P	03844 R	03844 M	03844 S	03844 A	CKL-AAF 0026	
AAF 0036	3/8"	16/232	30	17	153	72	19	50	0,5	03844 P	03844 R	03844 M	03844 S	03844 A	CKL-AAF 0036	
AAF 0046	1/4"	16/232	60	35	187	88	20	60	0,7	06050 P	06050 R	06050 M	06050 S	06050 A	CKL-AAF 0046	
AAF 0056	3/8"	16/232	60	35	187	88	20	60	0,7	06050 P	06050 R	06050 M	06050 S	06050 A	CKL-AAF 0056	
AAF 0076	1/2"	16/232	78	46	187	88	20	60	0,7	07050 P	07050 R	07050 M	07050 S	07050 A	CKL-AAF 0076	
AAF 0106	3/4"	16/232	120	70	257	88	20	80	0,8	14050 P	14050 R	14050 M	14050 S	14050 A	CKL-AAF 0106	
										quality class - solids (ISO 8573-1)	6	3	2	1	1 <sup>3)</sup>	-
										residual oil content [mg/m³]	-	-	<0,1	<0,01	<0,005	-
										quality class - oils (ISO 8573-1)	-	-	2	1	1	-
										pressure drop - new element [mbar / psi]	10 / 0,145	20 / 0,290	50 / 0,725	80 / 1,160	60 / 0,870	-
										change filter cartridge at pressure drop [mbar / psi]	350 / 5,07	350 / 5,07	350 / 5,07	350 / 5,07	6 months <sup>1)</sup>	-
										filter material	acrylic fibres, cellulose	borosilicate micro fibres		activated carbon	-	
										min. operating temperature (°C / °F)	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
max. operating temperature (°C / °F)	65 / 149	65 / 149	65 / 149	65 / 149	45 / 113	65 / 149										

CORRECTION FACTORS																
Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232	
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	

<sup>1)</sup> Filter elements "A" must be changed periodically to suit application, but at least every 6 months. Activated carbon filters must not operate in oil saturated conditions.  
<sup>2)</sup> For size AAF 0016 no differential pressure indicator and no internal condensate drain is available, IED not available  
<sup>3)</sup> Valid if "S" filter cartridge is installed upstream.

# AF SERIES

## ALUMINIUM COMPRESSED AIR FILTERS

operating pressure	<b>16 bar</b>
volume flow rate	<b>60 to 2760 Nm<sup>3</sup>/h</b>
connections	<b>3/8" to 3"</b>
operating temp. range	<b>1,5 to 65 °C</b>
standard colour	<b>RAL 5012</b>

### APPLICATIONS

- general industrial applications
- automotive
- electronics
- food and beverage
- chemical
- petrochemical
- plastics
- paint

### DESCRIPTION

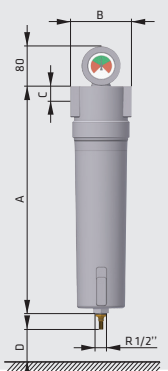
AF filter housings are designed for high efficient removal of solid particles, water, oil aerosols, hydrocarbons, odour and vapours from compressed air<sup>(1)</sup> systems. To meet the required compressed air quality appropriate filter element (B, P, R, M, S, A, A<sup>2</sup>, H<sup>2</sup>, MS<sup>2</sup>) must be installed into filter housing.

<sup>(1)</sup> For any other technical gas please contact producer or your local distributor.





TECHNICAL DATA										FILTER ELEMENTS									
Filter housing size	Pipe size	Max. oper. press.	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass	B sintered 15 µm	P prefilter 3 µm	R prefilter 1 µm	M microfilter 0,1 µm	S microfilter 0,01 µm	A activated carbon	A <sup>2</sup> adsorption (act. carbon)	H <sup>2</sup> catalyst (hopcalite)	MS <sup>2</sup> molecular sieve	
			[bar/psi]	Nm <sup>3</sup> /h	scfm	A	B	C											D
AF 0056	3/8"	16/232	60	35	187	88	20	60	0,7	06050 B15	06050 P	06050 R	06050 M	06050 S	06050 A	-	-	-	
AF 0076	1/2"	16/232	78	46	187	88	20	60	0,7	07050 B15	07050 P	07050 R	07050 M	07050 S	07050 A	07050 A <sup>2</sup>	07050 H <sup>2</sup>	07050 MS <sup>2</sup>	
AF 0106	3/4"	16/232	120	70	257	88	20	80	0,8	14050 B15	14050 P	14050 R	14050 M	14050 S	14050 A	14050 A <sup>2</sup>	14050 H <sup>2</sup>	14050 MS <sup>2</sup>	
AF 0186	1"	16/232	198	116	263	125	32	100	1,8	12075 B15	12075 P	12075 R	12075 M	12075 S	12075 A	12075 A <sup>2</sup>	12075 H <sup>2</sup>	12075 MS <sup>2</sup>	
AF 0306	1"	16/232	335	197	363	125	32	120	2,5	22075 B15	22075 P	22075 R	22075 M	22075 S	22075 A	22075 A <sup>2</sup>	22075 H <sup>2</sup>	22075 MS <sup>2</sup>	
AF 0476	1 1/2"	16/232	510	300	461	125	32	140	2,5	32075 B15	32075 P	32075 R	32075 M	32075 S	32075 A	32075 A <sup>2</sup>	32075 H <sup>2</sup>	32075 MS <sup>2</sup>	
AF 0706	1 1/2"	16/232	780	459	640	125	32	160	3,2	50075 B15	50075 P	50075 R	50075 M	50075 S	50075 A	50075 A <sup>2</sup>	50075 H <sup>2</sup>	50075 MS <sup>2</sup>	
AF 0946	2"	16/232	1000	588	684	163	43	520	5,1	51090 B15	51090 P	51090 R	51090 M	51090 S	51090 A	-	-	-	
AF 1506	2"	16/232	1500	882	935	163	43	770	7,1	76090 B15	76090 P	76090 R	76090 M	76090 S	76090 A	-	-	-	
AF 1756	2 1/2"	16/232	1680	990	935	163	43	770	6,9	76090 B15	76090 P	76090 R	76090 M	76090 S	76090 A	-	-	-	
AF 2006	3	16/232	2160	1270	795	240	59	630	12,9	51140 B15	51140 P	51140 R	51140 M	51140 S	51140 A	-	-	-	
AF 2406	3	16/232	2760	1620	1000	240	59	780	14,0	75140 B15	75140 P	75140 R	75140 M	75140 S	75140 A	-	-	-	
										quality class - solids (ISO 8573-1)	7	6	3	2	1	1 <sup>3)</sup>	1 <sup>3)</sup>	1 <sup>3)</sup>	
										residual oil content [mg/m <sup>3</sup> ]	-	-	-	<0,1	<0,01	<0,005	<0,005	-	
										quality class - oils (ISO 8573-1)	-	-	-	2	1	1	0/1	-	
										pressure drop - new element [mbar / psi]	20 / 0,290	10 / 0,145	20 / 0,290	50 / 0,725	80 / 1,160	60 / 0,870	see spec.	see spec.	< 50 / 0,725
										change filter cartridge at pressure drop [mbar / psi]	<sup>1)</sup>	350 / 5,07	350 / 5,07	350 / 5,07	350 / 5,07	6 months <sup>2)</sup>	6 months <sup>2)</sup>	6 months <sup>2)</sup>	
										filter material	sintered brass	acrylic fibres, cellulose	borosilicate micro fibres		borosilicate micro fibres				
														activ. carbon	activ. carbon	hopcalite	molecular sieve		
										pleated version	-	✓	✓	✓	✓	-	✓	✓	✓
										wrapped version	-	-	-	-	-	✓	-	-	-
										sintered version	✓	-	-	-	-	-	-	-	-
										min. operating temperature (°C / °F)	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
										max. operating temperature (°C / °F)	65 / 149	65 / 149	65 / 149	65 / 149	65 / 149	45 / 113	45 / 113	45 / 113	45 / 113



CORRECTION FACTORS																
Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232	
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	

<sup>1)</sup> B filter element can be cleaned with ultrasonic bath or with back flushing. Intervals of cleaning depends of application. If necessary replace filter element with new one.  
<sup>2)</sup> Filter elements "A, A<sup>2</sup>, H<sup>2</sup>", must be changed periodically to suit application, but at least every 6 months. Activated carbon filters must not operate in oil saturated conditions.  
<sup>3)</sup> Valid if "S" filter cartridge is installed upstream.  
<sup>4)</sup> For elements A<sup>2</sup>, H<sup>2</sup> and MS<sup>2</sup> it is necessary to reduce the flow according to technical data sheet specification.

# CF SERIES

## ALUMINIUM COMPRESSED AIR FILTERS

operating pressure	<b>20 bar</b>
volume flow rate	<b>72 to 2760 Nm<sup>3</sup>/h</b>
connections	<b>3/8" to 3"</b>
operating temp. range	<b>1,5 to 65 °C</b>
standard colour	<b>RAL 5012</b>

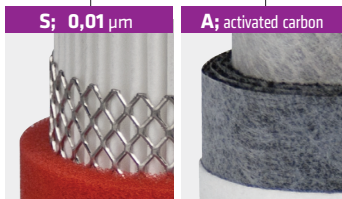
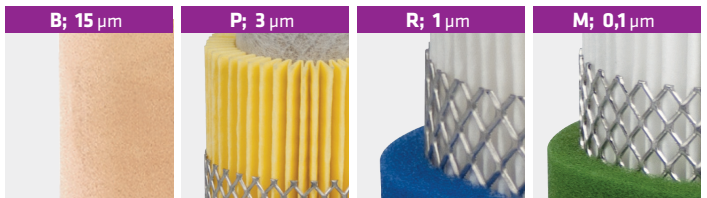
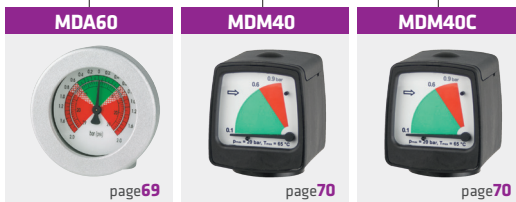
### APPLICATIONS

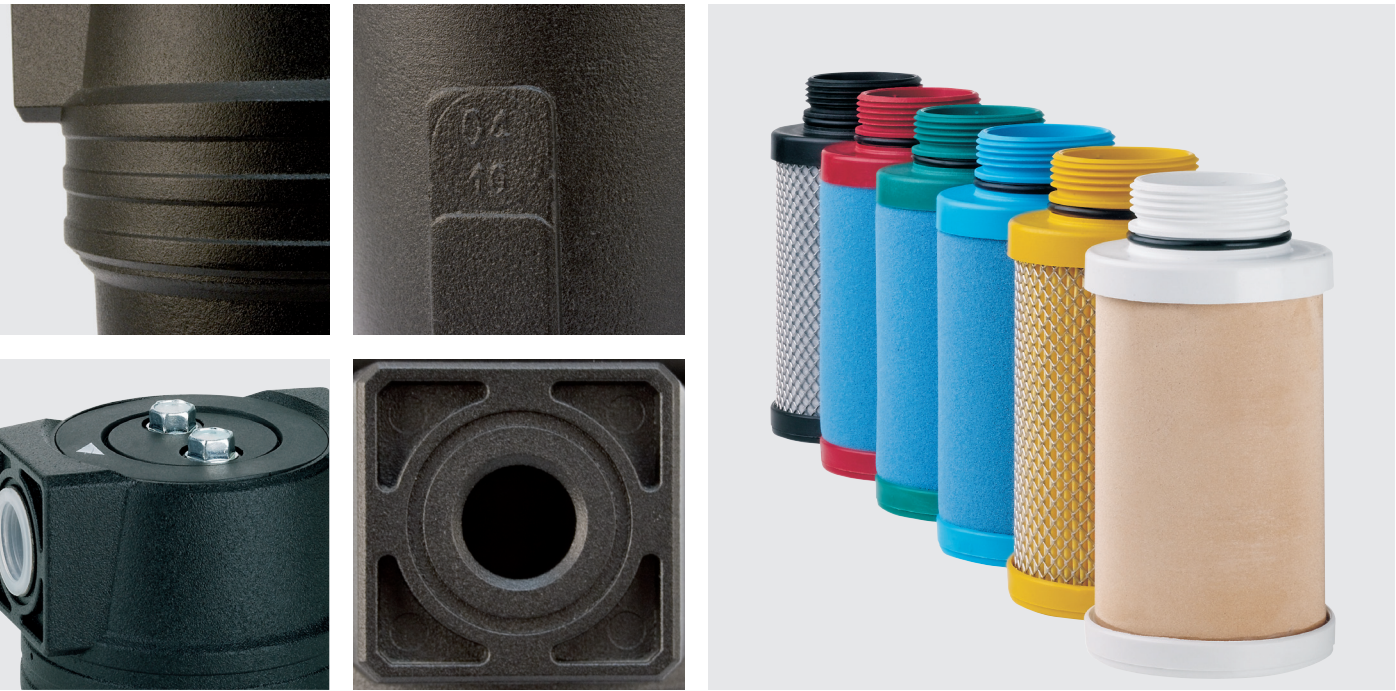
- general industrial applications
- automotive
- electronics
- food and beverage
- chemical
- petrochemical
- plastics
- paint

### DESCRIPTION

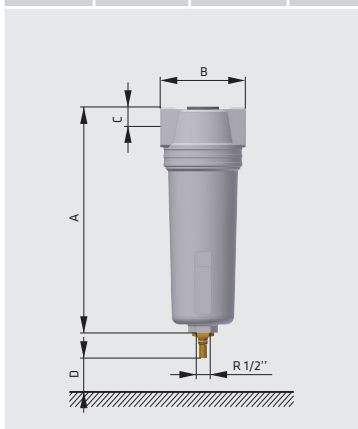
CF filter housings are designed for high efficient removal of solid particles, water, oil aerosols, hydrocarbons, odour vapours from compressed air<sup>(1)</sup> systems. To meet the required compressed air quality appropriate filter element (B, P, R, M, S, A) must be installed into filter housing.

<sup>(1)</sup> For any other technical gas please contact producer or your local distributor.





TECHNICAL DATA										FILTER ELEMENTS					
Filter housing size	Pipe size	Max. oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass	B	P	R	M	S	A
	inch		bar/psi	Nm³/h	scfm	A	B	C		D	sintered 15 µm	prefilter 3 µm	prefilter 1 µm	microfilter 0,1 µm	microfilter 0,01 µm
CF 20	3/8"	20/290	72	42	187	88	20	80	0,7	20 CB	20 CP	20 CR	20 CM	20 CS	20 CA
CF 21	1/2"	20/290	96	56	256	88	20	80	0,8	21 CB	21 CP	21 CR	21 CM	21 CS	21 CA
CF 30	1/2"	20/290	150	88	278	106	25	100	1,3	30 CB	30 CP	30 CR	30 CM	30 CS	30 CA
CF 31	3/4"	20/290	216	127	278	106	25	100	1,3	31 CB	31 CP	31 CR	31 CM	31 CS	31 CA
CF 40	1"	20/290	282	166	252	125	32	120	2,1	40 CB	40 CP	40 CR	40 CM	40 CS	40 CA
CF 41	1"	20/290	360	212	352	125	32	140	2,4	41 CB	41 CP	41 CR	41 CM	41 CS	41 CA
CF 42	1 1/4"	20/290	432	254	352	125	32	140	2,4	42 CB	42 CP	42 CR	42 CM	42 CS	42 CA
CF 43	1 1/2"	20/290	510	300	450	125	32	160	3,2	43 CB	43 CP	43 CR	43 CM	43 CS	43 CA
CF 44	1 1/2"	20/290	750	441	450	125	32	160	3,2	44 CB	44 CP	44 CR	44 CM	44 CS	44 CA
CF 50	2"	20/290	888	522	605	160	43	180	5,1	50 CB	50 CP	50 CR	50 CM	50 CS	50 CA
CF 51	2"	20/290	1176	692	605	160	43	180	5,1	51 CB	51 CP	51 CR	51 CM	51 CS	51 CA
CF 52	2 1/2"	20/290	1440	847	685	160	43	200	6,3	52 CB	52 CP	52 CR	52 CM	52 CS	52 CA
CF 60	3"	20/290	1968	1158	800	240	60	300	12,9	60 CB	60 CP	60 CR	60 CM	60 CS	60 CA
CF 61	3"	20/290	2760	1624	800	240	60	300	12,9	61 CB	61 CP	61 CR	61 CM	61 CS	61 CA



quality class - solids (ISO 8573-1)	7	6	3	2	1	1 <sup>3)</sup>
residual oil content [mg/m³]	-	-	-	<0,1	<0,01	<0,005
quality class - oils (ISO 8573-1)	-	-	-	2	1	1
pressure drop - new element [mbar / psi]	20 / 0,290	10 / 0,145	20 / 0,290	50 / 0,725	80 / 1,160	60 / 0,870
change filter cartridge at pressure drop [mbar / psi]	<sup>1)</sup>	350 / 5,07	350 / 5,07	350 / 5,07	350 / 5,07	6 months <sup>2)</sup>
filter media	sintered brass	acrylic fibres, cellulose	borosilicate micro fibres			activated carbon
pleated version	-	✓	✓	✓	✓	-
wrapped version	-	-	-	-	-	✓
sintered version	✓	-	-	-	-	-
min. operating temperature (°C / °F)	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
max. operating temperature (°C / °F)	65 / 149	65 / 149	65 / 149	65 / 149	65 / 149	45 / 113

CORRECTION FACTORS																			
Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232	247	261	276	290
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	2,25	2,38	2,50	2,63

<sup>1)</sup> B filter element can be cleaned with ultrasonic bath or with back flushing. Intervals of cleaning depends of application. If necessary replace filter element with new one.  
<sup>2)</sup> Filter elements "A", must be changed periodically to suit application, but at least every 6 months. Activated carbon filters must not operate in oil saturated conditions.  
<sup>3)</sup> Valid if "S" filter cartridge is installed upstream.

# EMD SERIES

## ELECTRONIC CONDENSATE DRAIN

operating pressure	<b>16 bar</b>
drain capacity	<b>up to 75 l/h</b>
connections	<b>1/2"</b>
operating temp. range	<b>1,5 to 65 °C</b>

### APPLICATIONS

- air compressor (piston or screw)
- after-cooler
- cyclone condensate separator
- pressure vessel/air tank
- air dryer
- air filter

### DESCRIPTION

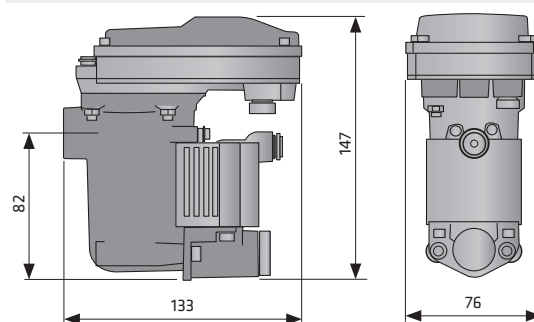
EMD12 series drain is designed for fully automatic discharging of condensate or any other non-aggressive fluid from compressed air system. The units can be installed as external drain on any application specified. Condensate accumulates in the collecting reservoir. When the level is high enough condensate is being discharged from the system without any air losses. Fluid level is detected by precise capacitive level sensor.

Special self-cleaning direct acting valve assures reliable operating. EMD series is also equipped with operation alarm, led indicator, test button and internal strainer. Version with Service Network for diagnostics parameter setting and alarm output is also available.



### ADVANTAGES

- ✓ integrated strainer (easy access/cleaning)
- ✓ compact design
- ✓ direct acting, self cleaning valve (patented)
- ✓ optimised for easy service (service kit)
- ✓ horizontal or vertical installation
- ✓ PA housing



TECHNICAL DATA	EMD12	EMD12A	EMD12C	EMD12	EMD12A	EMD12C	EMD12	EMD12A	EMD12A	EMD25	EMD 75		
Service network connection	-	-	✓	-	-	✓	-	-	-	230 V	115 V	230 V	115 V
Alarm output	-	✓	✓	-	✓	✓	-	✓	✓	-	-	-	-
Voltage	230 VAC, 50-60 Hz			115 VAC, 50-60 Hz			24 Vac, 50-60 Hz		24Vdc	230 V	115 V	230 V	115 V
Internal fuse	5 x 20 1A T			5 x 20 1A T			2A		2A	5 x 20 1A T		5 x 20 1A T	
Power	10 VA			10 VA			10 VA		8,5 A	24 A		24 A	
Operating pressure range	0-16 bar (0-232 psi)			0-16 bar (0-232 psi)			0-16 bar (0-232 psi)		0-8 bar	0-16 bar (0-232 psi)		0-16 bar (0-232 psi)	
Drain capacity (at 7 bar/101 psi)	12 l/h (0,007cfm)			12 l/h (0,007cfm)			12 l/h (0,007cfm)		12 l/h	25 l/h		75 l/h	
Operating temperature range	1,5-65°C (35-149°F)												
Inlet connection	G 1/2"			G 1/2"			G 1/2"		G 1/2"	G 1/2"		G 1/2"	
Outlet connection	Push connection for tube ø8												
Protection class	IP54												
Mass [kg]				0,55						0,9		1,2	
Dimensions A x B x C [mm]	133 x 76 x 147												
Peak compressor capacity [m³/min]	a				8,8					16,6		55,0	
	b				7,4					15,4		46,2	
	c				4,6					9,6		28,7	
Peak dryer capacity [m³/min]	a				18,56					38,6		116,0	
	b				14,9					31,0		93,1	
	c				9,28					19,3		58,0	
Peak filter capacity [m³/min]	a				92,8					193,3		580,0	
	b				74,4					154,9		465,0	
	c				46,4					96,6		290,0	

- a Northern Europe, Canada, Central Asia
- b Rest of the World
- c Moist tropical and subtropical regions

The amount of condensed water in compressed air system depends mainly on outside air temperature. Please take the relevant climate zone into account when dimensioning your specific EMD-12 drain series application: