



INDUSTRIAL COMPRESSED AIR EQUIPMENT

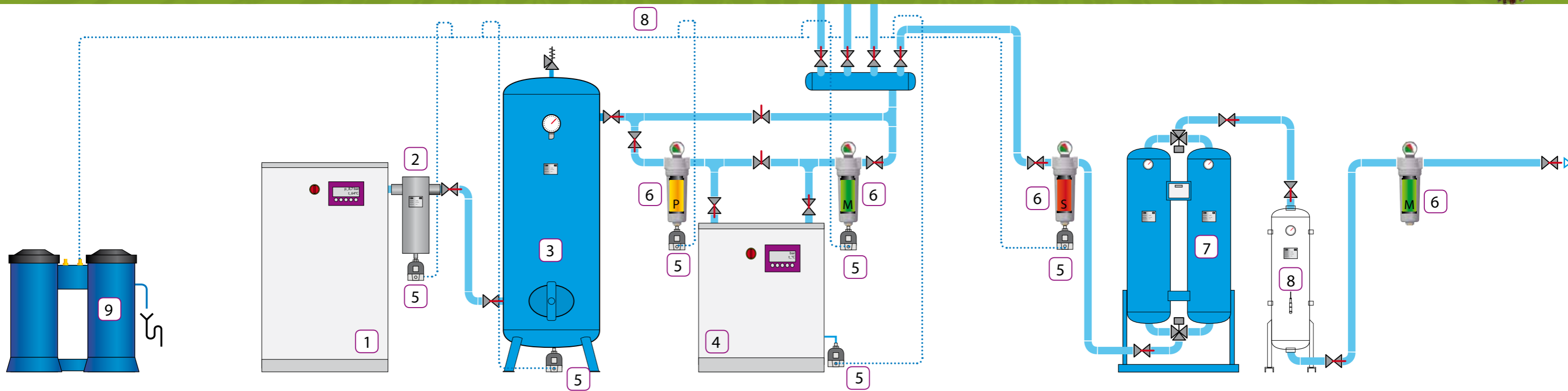
Product & Technical Manual



masters of the air



Basic Components of Compressed Air System



1. COMPRESSOR

Air is compressed by one of 3 major types of compressor – reciprocating piston, rotary screw or centrifugal.

2. CYCLONIC CONDENSATE SEPARATOR

Uses centrifugal motion to separate liquid water out of compressed air. Rotation causes the condensate mist to coalesce on the centrifugal separator walls, when the condensate gains enough mass it falls to the bottom of the separator bowl where it pools in the sump until it is flushed out of the system by the automatic float drain valve.

3. AIR RECEIVER

Plays very important role in compressed air systems: dispersing heat from the air, damping pulsations caused by reciprocating compressors, providing a location for free water and oil to settle from the compressed air stream, supplying peak demands from stored air with less need to run an extra compressor, reducing load/unload or start/ stop cycle frequency to help compressors run more efficiently, reducing motor starts and slowing system pressure changes to allow better compressor control and more stable system pressures.

4. REFRIGERATED DRYER

Compressed air leaving the compressor is normally warmer than the ambient air and fully saturated with moisture. As the air cools the moisture will condense in the compressed air lines. Excessive entrained moisture can result in undesired pipe corrosion and contamination of tools or product. For this reason an air dryer is normally required. Common types: refrigerant, desiccant or membrane.

5. AUTODRAIN

Drains are needed at all separators, filters, dryers and receivers in order to remove the liquid condensate from the compressed air system. Lack of drains can allow slugs of moisture to flow downstream that can overload the air dryer and foul point-of-use equipment. Main types are zero air loss, electrically operated solenoid valves, float operated mechanical drains or manual drains.

6. FILTER

Falcon high efficiency compressed air filters are vital for removal of solid particles, water, oil aerosols, hydrocarbons, odour and vapours from compressed air systems. To meet the required compressed air quality appropriate filter element (B, P, R, M, S, A, A², H², M_s, S_s) must be installed into filter housing. Common types: particulate, coalescing or absorption.

7. DESSICANT DRYER

Some end-use applications require very dry air, such as food processing, instruments, electronics or high quality manufacturing. Drying the air to dew points below ambient conditions is also necessary to prevent ice buildup where pipes are exposed to cold conditions.

8. CARBON TOWER

Activated carbon towers eliminate hydrocarbon vapours and odours from compressed air. Activated carbon towers are used at applications where content of oil vapours needs to be reduced to minimum. They are able to absorb oil carry-over (both liquid and vapour) to provide the plant with technically oil-free compressed air, particularly breathing air, paint systems, food contact, etc.

9. OIL-WATER SEPARATOR

Local environmental laws and regulations state that condensate drained from compressed air systems cannot be discharged to the sewage system due to the content of compressor lubricating oil. Oil/water separators are one of the most effective and economical solutions.

International Certificates



Contents

Filters, Dryers & Accessories



Aluminium Industrial Filters

CF Series 16 bar (20 bar on application)

PAGE 6



Cast Aluminium High Pressure Filters

HF Series 50 bar

PAGE 8



Cyclone Condensate Separators

CKL-B Series 16 bar

PAGE 10



Breathing Air Filters

B-AIR Series 16 bar

PAGE 12



Vacuum Pump Protection Filters

P-VAC Series 20–2000 mbar

PAGE 13



Silicone Free Filters

AFs Series 16 bar

PAGE 14



Air Filter Elements

Quality Compressed Air Elements

PAGE 15



Pressure Drop Indicator

PDI16, MDA 60, MDM 60, MDM 60E, MDM 60C

PAGE 16



Electronic Pressure Gauge

MDH Series

PAGE 17



Filter Mounting Kit

AK Assembly Kit

PAGE 18



Automatic and Manual Condensate Drains

MCD 20 bar AOK 16B 16 bar Exhaust Silencer

PAGE 18



Float Operated Automatic Condensate Drains

AOK 20B Series 20 bar

PAGE 19



Electronic Timer Controlled Condensate Drains

TD16M Series 16 bar

PAGE 20



Electronic Condensate Drains

EMD 12 Series

PAGE 21



Electronic Condensate Drains

ECD-B Series

PAGE 22



Activated Carbon Towers

TAC Series

PAGE 24



Oil-Water Separators for Compressed Air

WOS-M Series

PAGE 25



Oil-Water Separators for Compressed Air

WOS Series

PAGE 26



Adsorption Dryers

A-Dry 6-200

PAGE 28



Adsorption Dryers

B-DRY 110–1000

PAGE 30



Industrial Applications

CF Series - Aluminium Compressed Air Filters - 16 Bar



Compressed air filters CF Series are used for efficient removal of solid particles, water, oil vapours, taste and odours from compressed air in industrial applications.

The type and size of filters depends on compressed air flow, type and quantity of pollutant.

- max. operating pressure: 16 bar(230 psi),
20 bar(290 psi) on application
- operating temperature range: 1.5 to 65°C (35 to 149°F)



Centrifugal Condensate Separator Element



CF FILTER CARTRIDGES

CF Filter cartridge range includes 6 filtration stages (B, P, R, M, S and A), which are designed to remove particulates, water, oil vapours, taste and odours from compressed air.

The design of CF Filter media ensures the effective and efficient removal of most contaminants from compressed air systems. Note that these filters will not remove carbon monoxide or carbon dioxide.

Threaded connection of filter cartridges ensures reliable fitting into the filter head.

All materials are suitable for operation in the temperature range from 1.5 to 65°C (35 to 149°F). They are corrosion-proof and suitable for most applications.

The filter and cartridge size is determined by the compressed air flow. They are all designed for operational pressure of up to 20bar (290 psi)



TECHNICAL DATA									CF-FILTER ELEMENTS						
Filter Model	Pipe size	Flow Rate at 7 bar		Dimensions (mm)				Mass	CKL-CF centrifugal separator	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
	Inch	Nm³/h	scfm	A	B	C	D	Kg							
CF 20	3/8	72	42	187	88	20	80	0.7	CKL-CF 20	20CB	20CP	20CR	20CM	20CS	20CA
CF 21	1/2	96	56	256	88	20	80	0.8	CKL-CF 21	21CB	21CP	21CR	21CM	21CS	21CA
CF 30	1/2	150	88	278	106	25	100	1.3	CKL-CF 30	30CB	30CP	30CR	30CM	30CS	30CA
CF 31	3/4	216	127	278	106	25	100	1.3	CKL-CF 31	31CB	31CP	31CR	31CM	31CS	31CA
CF 40	1	282	166	252	125	32	120	2.1	CKL-CF 40	40CB	40CP	40CR	40CM	40CS	40CA
CF 41	1	360	212	352	125	32	140	2.4	CKL-CF 40	41CB	41CP	41CR	41CM	41CS	41CA
CF 42	1 1/4	432	254	352	125	32	140	2.4	---	42CB	42CP	42CR	42CM	42CS	42CA
CF 43	1 1/2	510	300	450	125	32	160	3.2	CKL-CF 43	43CB	43CP	43CR	43CM	43CS	43CA
CF 44	1 1/2	750	441	450	125	32	160	3.2	CKL-CF 43	44CB	44CP	44CR	44CM	44CS	44CA
CF 50	2	888	522	605	160	43	180	5.1	CKL-CF 50	50CB	50CP	50CR	50CM	50CS	50CA
CF 51	2	1.176	692	605	160	43	180	5.1	CKL-CF 50	51CB	51CP	51CR	51CM	51CS	51CA
CF 52	2 1/2	1.440	847	685	160	43	200	6.3	CKL-CF 52	52CB	52CP	52CR	52CM	52CS	52CA
CF 60	3	1.968	1158	800	240	60	300	12.9	CKL-CF 61	60CB	60CP	60CR	60CM	60CS	60CA
CF 61	3	2.760	1624	800	240	60	300	12.9	CKL-CF 61	61CB	61CP	61CR	61CM	61CS	61CA
Solid particle size: down to										15 microns	3 microns	1 micron	0.1 micron	0.01 micron	-
Quality class -solids (ISO 8573-1)										4	3	2	1	1	-
Residual Oil content (mg/m³ / ppm)										-	-	-	0.1/0.08	0.01/0.01	0.005/0.005
Quality class oils (ISO 8573-1)										-	-	-	2	1	1
Pressure drop -new element (mbar/psi)										30/0.43	40/0.58	<50/0.72	<80/1.16	<90/1.3	120/1.74
Change filter at pressure drop (mbar/psi)										600/8.7	600/8.7	600/8.7	600/8.7	600/8.7	6 monthly

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	0.5	0.63	0.75	0.88	1	1.13	1.25	1.38	1.5	1.63	1.75	1.88	2	2.13	2.25	2.38	2.5	2.63

Activated Carbon filters must not be operated in oil saturated conditions and be changed at least every 6 months.

Industrial Applications

HF Series - Cast Aluminium High Pressure Filters - 50 bar



High Pressure Filters HF are used for industrial applications with pressure up to 50 bar (725 psi). Strong cast aluminium construction assures safety operating at high pressures.

The HF series is produced in accordance with Pressure Equipment Directive PED 97/23 CE.

- max. operating pressure: 50 bar (725 psi)
- operating temperature range: 1.5 to 65 °C (35 to 149 °F)



HF FILTER CARTRIDGES

Six filtration grades enables elimination of impurities from the compressed air in a temperature range 1.5 to 65°C (35 to 149°F)



TECHNICAL DATA									HF-FILTER ELEMENTS					
Filter Housing Model	Pipe size	Flow Rate		Dimensions (mm)				Mass Kg	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
		Nm ² /h	cfm	A	B	C	D							
HF 007	1/2	71	418	250	110	30	80	2.1	HF 6060 B	HF 6060 P	HF 6060 R	HF 6060 M	HF 6060 S	HF 6060 A
HF 010	3/4	112	659	250	110	30	90	2.1	HF 7060 B	HF 7060 P	HF 7060 R	HF 7060 M	HF 7060 S	HF 7060 A
HF 018	1	204	765	250	110	30	140	2.1	HF 12060 B	HF 12060 P	HF 12060 R	HF 12060 M	HF 12060 S	HF 12060 A
HF 047	1 1/2	282	1059	535	160	45	260	9.5	HF 22090 B	HF 22090 P	HF 22090 R	HF 22090 M	HF 22090 S	HF 22090 A
HF 070	1 1/2	400	1500	535	160	45	360	9.5	HF 32090 B	HF 32090 P	HF 32090 R	HF 32090 M	HF 32090 S	HF 32090 A
HF 094	2	494	1853	715	160	45	540	12.2	HF 50090 B	HF 50090 P	HF 50090 R	HF 50090 M	HF 50090 S	HF 50090 A
HF 150	2	799	3000	715	160	45	550	12.2	HF 51090 B	HF 51090 P	HF 51090 R	HF 51090 M	HF 51090 S	HF 51090 A
Solid particle size: down to									15 microns	3 microns	1 micron	0.1 micron	0.01 micron	-
Quality class -solids (ISO 8573-1)									4	3	2	1	1	-
Residual Oil content (mg/m ³ / ppm)									-	-	-	0.1/0.08	0.01/0.01	0.005/0.005
Quality class oils (ISO 8573-1)									-	-	-	2	1	1
Pressure drop -new element (mbar psi)									30/0.43	40/0.58	<50/0.72	<80/1.16	<120/1.74	<90/1.3
Change filter at pressure drop (mbar/psi)									600/8.7	600/8.7	600/8.7	600/8.7	600/8.7	6 monthly
CORRECTION FACTORS														
Operating Pressure (bar)		3	5	7	10	13	16	20	30	40	50			
Correction Factor		0.50	0.75	1	1.38	1.75	2.13	2.63	3.88	5.13	6.38			

Activated Carbon filters must not be operated in oil saturated conditions and be changed at least every 6 months.

Industrial Applications

CKL-B Series - Aluminium Condensate Separators - 16 bar



Efficient removal of condensate from a compressed air system has several advantages: extended life of compressed air tools, improved lubrication of all pneumatic components, improved painting processes components and improved painting processes.

CKL-B condensate separators have been developed for high efficiency removal of bulk liquids and droplets from compressed air and vacuum systems with very low pressure drop. The separators provide added protection and improved performance for dryers and filters.

Inside the housing there is an insert with vanes that create controlled rotation of the air. As a result of centrifugal action liquids (water, oil) and large particles are forced to the housing wall, slowed down and accumulated at the bottom of separator housing as condensate. The turbulent free zone in the lower part of the filter housing prevents condensate from being picked up and carried over into the airstream.

To discharge condensate from the CKL-B cyclone separator it is essential to install automatic or electronic condensate drain. Standard equipment includes automatic condensate drain AOK 16B.



Benefits

Construction of aluminium cyclone separators assures high efficiency condensate separation with low pressure drop.

The cartridge inside the cyclone separator assures reliable operation for the life of the separator, without clogging or increased operating costs.

Operating temperature range : 1.5 to 65°C (35 to 149°F)

Operating pressure range : 0 - 16 bar (0-232 psi).

The aluminium bodies are finished with powder coat paint to prevent corrosion.)



Condensate Separator element

TECHNICAL DATA

Filter Model	Pipe size	Flow Rate		Dimensions (mm)				Mass
	Inch	Nm ³ /h	cfm	A	B	C	D	Kg
CKL 005 B	3/8	120	70	187	88	20	60	0.7
CKL 007 B	1/2	155	91	187	88	20	60	0.7
CKL 010 B	3/4	235	138	257	88	20	80	0.8
CKL 018 B	1	365	215	263	125	32	100	1.8
CKL 047 B	1 1/2	770	452	461	125	32	140	2.5
CKL 094 B	2	1.280	753	684	163	43	520	5.1
CKL 150 B	2 1/2	2.460	1447	684	163	43	520	5.1
CKL 200 B	3	2.850	1677	795	240	59	630	12.9



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	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13

Special Applications

B-AIR Series - Breathing Air Filter Set

The B-AIR™ point of use filter set has been specifically developed for high efficient preparation of top quality breathing air.

On request B-AIR™ filter set can be supplied with wall mounting brackets, pressure regulator and quick connect safety couplings.

Operating temperature range : 1.5 to 45°C (35 to 113°F)

Operating pressure range : 0 - 16 bar (0 – 232 psi).

APPLICATIONS

- Spray painting
- Sandblasting
- Medical & Hospital air
- Asbestos removal
- Cylinder filling
- Enclosed space breathing air
- Pharmaceutical manufacturing



WARNING! Breathing air filter set B-AIR is not declared as a CO and CO₂ removal filter. Despite that, the B-AIR filter element can reduce CO content.

TECHNICAL DATA									B-AIR ELEMENTS						
Filter Model	Pipe size	Flow Rate at 7 bar		Dimensions (mm)				Mass	S	H ²	A ²				
	Inch	Nm ³ /h	cfm	A	B	C	D	Kg							
B-AIR 0076	1/2	78	46	187	264	20	60	3 x 0.47	07050 S	07050 H ²	07050 A ²				
B-AIR 0106	3/4	120	70	257	264	20	80	3 x 0.6	14050 S	14050 H ²	14050 A ²				
B-AIR 0186	1	198	116	263	375	32	100	3 x 1.57	12075 S	12075 H ²	12075 A ²				
B-AIR 0306	1	335	197	363	375	32	120	3 x 2.2	22075 S	22075 H ²	22075 A ²				
B-AIR 0476	1 1/2	510	300	461	375	32	140	3 x 2.8	32075 S	32075 H ²	32075 A ²				
B-AIR 0706	1 1/2	780	459	640	375	32	160	3 x 3.9	50075 S	50075 H ²	50075 A ²				
FILTER MEDIUM									borosilicate micro fibers	H ² hopcalite, borosilicate microfibres	A ² activated carbon, borosilicate microfibres				
Solid particle size purification									>0.01µm	>0.1µm	>0.1µm				
Quality class solids (ISO 8573-1)									1	1	1				
Quality class OILS (ISO 8573-1)									1	–	0/1				
Pressure drop new element									80/1.16	–	–				
Change element at press. drop mbar/psi									3 months	3 months	3 months				
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	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13

Set includes 3 Filter Housings, 3 Filter Elements, 2 AOK 16B condensate drains, 1 MCD drain & 1 PDI differential pressure indicator

P-VAC Series - Vacuum Pump Protection Filters

P-VAC filters have been specifically developed for protection of vacuum pumps. These filters are optimised for high-efficient removal of solid particles and other contamination from the suction side of vacuum pumps preventing damage to the pump.

For P-VAC filter series, two filtration stages are available. Coarse prefilter VACP removes bulk liquid and large solid particles while high efficiency microfilter VACM removes very fine impurities which may damage the pump.

- operating pressure range: 20 – 2000 mbar (abs) (0.29 – 29 psi)

- operating temp. range: 1.5 – 65 °C (35-149 °F)

APPLICATIONS

- vacuum pumps



TECHNICAL DATA									FILTER ELEMENT TYPE	
Filter Model	Pipe size	Flow Rate at 7 bar		Dimensions (mm)				Mass	Coarse P prefilter	Fine F microfilter
	Inch	Nm ³ /h	cfm	A	B	C	D	Kg		
P-VAC 0056	3/8	7.5	4.5	187	88	20	60	0.7	06050 VACP	06050 VACM
P-VAC 0076	1/2	9.8	5.8	187	88	20	60	0.7	07050 VACP	07050 VACM
P-VAC 0106	3/4	15.0	8.8	257	88	20	80	0.8	14050 VACP	14050 VACM
P-VAC 0186	1	24.8	14.6	263	125	32	100	1.8	12075 VACP	12075 VACM
P-VAC 0306	1	41.9	24.6	363	125	32	120	2.5	22075 VACP	22075 VACM
P-VAC 0476	1 1/2	63.8	37.5	461	125	32	140	2.5	32075 VACP	32075 VACM
P-VAC 0706	1 1/2	97.5	57.4	640	125	32	160	3.2	50075 VACP	50075 VACM
P-VAC 0946	2	125	73.6	684	163	43	520	5.1	51090 VACP	51090 VACM
P-VAC 1506	2	187	110	935	163	43	770	7.1	76090 VACP	76090 VACM
P-VAC 1756	2 1/2	210	123	935	163	43	770	6.9	76090 VACP	76090 VACM
P-VAC 2006	3	270	159	795	240	59	630	12.9	51140 VACP	51140 VACM
P-VAC 2406	3	345	203	1000	240	59	780	14.0	75140 VACP	75140 VACM

Replace cartridges every 12 months or earlier for specific applications.



AFs filters have been specifically developed for applications in the paint industry. These filters are free of substances that could cause defects in paint applications, and provide high efficiency removal of water, oil aerosols, hydrocarbons and odour vapours from compressed air systems.



To meet the required compressed air quality, appropriate 'paint compatible' filter element must be installed into the filter housing. These elements have been developed tested and proven for paint operations.

- max. operating pressure: 16 bar (232 psi)
- operating temperature range: 1.5 – 65°C (35 – 149 °F)

APPLICATIONS

- Painting applications
- Automotive industry

TECHNICAL DATA									AFS ELEMENT	
Filter Model	Pipe size	Flow Rate at 7 bar		Dimensions (mm)				Mass Kg	Ms Microfibre 0.1µm	Ss Microfibre 0.01µm
	Inch	Nm ² /h	cfm	A	B	C	D			
AFs 0056	3/8	60	35	187	88	20	60	0.7	06050 Ms	06050 Ss
AFs 0076	1/2	75	46	187	88	20	60	0.7	07050 Ms	07050 Ss
AFs 0106	3/4	120	70	257	88	20	80	0.8	14050 Ms	14050 Ss
AFs 0186	1	198	116	263	125	32	100	1.8	12075 Ms	12075 Ss
AFs 0306	1	335	197	363	125	32	120	2.5	22075 Ms	22075 Ss
AFs 0476	1 1/2	510	300	461	125	32	140	2.5	32075 Ms	32075 Ss
AFs 0706	1 1/2	780	459	640	125	32	160	3.2	50075 Ms	50075 Ss
AFs 0946	2	1.000	588	684	163	43	520	5.1	51090 Ms	51090 Ss
AFs 1506	2	1.500	882	935	163	43	770	7.1	76090 Ms	76090 Ss
AFs 1756	2 1/2	1.680	990	935	163	43	770	6.9	76090 Ms	76090 Ss
AFs 2006	3	2.160	1270	795	240	59	630	12.9	51140 Ms	51140 Ss
AFs 2406	3	2.760	1620	1000	240	59	780	14.0	75140 Ms	75140 Ss

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	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13

B – 15 µm sintered brass
prefilter



P – 3 µm acrylic fibres, cellulose
prefilter



R – 1 µm acrylic fibres, cellulose
prefilter



M – 0.1 borosilicate microfibrres
microfilter



S – 0.01 borosilicate microfibrres
microfilter



A – activated carbon, borosilicate microfibrres
adsorption



A² – activated carbon, borosilicate microfibrres
adsorption



H² – hopcalite, borosilicate microfibrres
catalyst



CKL-B – stainless steel, PA
centrifugal separation



Pressure Drop Indicators

For Compressed Air Filters

NB: ALL PRESSURE DROP INDICATORS ONLY INDICATE MEANINGFUL PRESSURE DROP AT FULL FLOW, AND IF THERE HAS BEEN NO EVENT TO AFFECT THE INTEGRITY OF THE ELEMENT. IF THERE IS LOW OR NO FLOW THERE WILL BE NO PRESSURE DROP

PDI 16 - Pressure Drop Indicator

The Pressure Drop Indicator PDI 16 has been developed to indicate pressure drop across the filter element in compressed air system. PDI 16 is typically installed on the head of the filter housing. PDI 16 saves compressed air energy by indicating when the filter element needs to be changed. If the filter element is clean, the indicator remains green. It changes to red when the filter is clogged and should be changed.

PDI 16 can be used in a wide variety of applications, if not sure, please contact us or your local dealer.

Technical Data:

- green area: pressure drop 0 - 0.6 bar (0 - 8.7 psi)
- red area: pressure drop 0.6 - 0.9 bar (8.7 - 13 psi)
- max. operating pressure: 16 bar (232 psi)
- operating temperature range: 1.5 to 65 °C (35 to 149 °F)

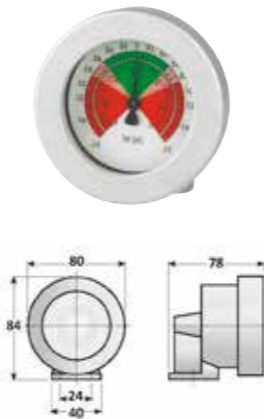


MDA 60 - Pressure Drop Indicator

Pressure drop indicator MDA 60 is used to accurately display the pressure drop across the filter. The housing is made of aluminium alloy, which is available either in white or aluminium colour.

Technical Data:

- max. operating pressure: 20 bar (290 psi)
- operating temperature range: 1.5 to 65 °C (35 to 149 °F)
- measuring range: +/- 2 bar (+/- 29 psi)



MDM 60, MDM 60E, MDM 60C - Pressure drop indicators

Magnetic differential manometer MDM 60 has been developed to indicate pressure drop across the filter element in compressed air systems (1).

- The Magnetic differential pressure drop indicator MDM60 is available in three versions: basic version MDM 60
- electronic version MDM 60E (with LED alarm light for cartridge changing)
- voltage-free dry contact version MDM 60C for remote alarm

Technical data:

- green area: pressure drop 0 – 0.6 bar (0 – 8.7 psi)
- red area: pressure drop 0.6 – 0.9 bar (8.7 - 13 psi)
- max. operating pressure: 16 bar (232 psi)
- operating temperature range: 1.5 to 65 °C (35 to 149 °F)



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

Electronic Pressure Gauge - EPG

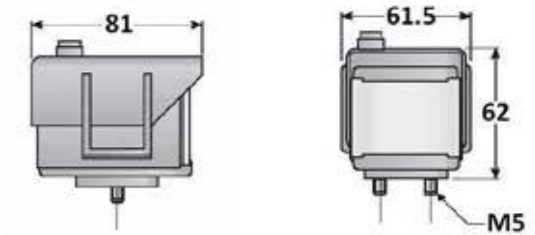
EPG Series

EPG Electronic Pressure Gauge

The EPG electronic pressure gauge is designed for monitoring of filter cartridge condition based on pressure drop, working hours, total hours or their combination.

A change filter cartridge warning is issued when these parameters approach their limiting values. It is battery operated and has voltage free contact output.

- An optional Alarm/ Warning output and Service Network Protocol for remote surveillance available.
- Specially designed electronics ensure low power consumption allowing long intervals between battery replacements, typically over 1 year with ordinary AA batteries.



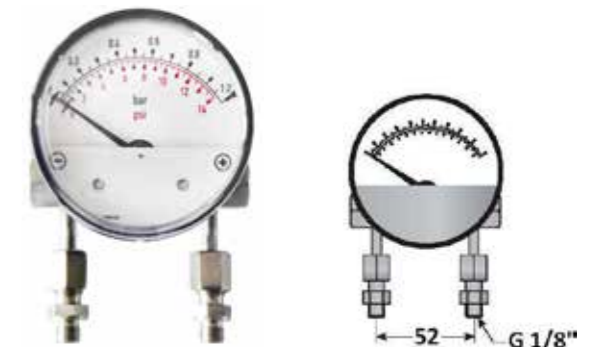
TECHNICAL DATA: EPG-60

TYPE	EPG-SN	EPG
Service network connection	Yes	No
Pressure range	0 – 16 bar (0 – 232 psi)	
Differential pressure range	0.07 – 1.00 bar (0 – 14.5 psi)	
Maximum differential pressure range	1 bar (14.7 psi)	
Operating temperature	Ambient	1.5°C – 40°C
	Compressed air	1.5°C – 65°C
Mass	130g without batteries	
Materials	PA6, fibreglass, NBR (seals)	
Battery Life	> 1 year (alkaline AA)	

MDH Differential High Pressure Drop Indicator

The Differential High Pressure Drop Indicator MDH has been developed for accurate indication of pressure drop across the filter element in the compressed air system. It is optimized for installing on the head of the filter housing.

- Operating pressure: 50 bar
- Operating temp range: 1.5 to 60°C
- The permissible medium temperature does not only depend on the instrument design, but also on the ignition temperature of the surrounding explosive atmosphere. Both aspects must be taken into account.



TECHNICAL DATA: MDH

Ambient temperature range	1.5 – 60°C	
Measuring range	0 – 400 mbar to 0 – 10 bar	0.58 psi to 0 – 147 psi
Static pressure	50 bar	1463, 3673, 5878 psi
Protection class	IP 54	
Accuracy	± 3% of full scale	
Connection	2 x G 1/8" male	

PERMISSIBLE MEDIUM TEMPERATURE

Temperature class of the ambient atmosphere (ignition temperature)	Maximum permissible temperature (in the pressure system)
T6 (>85°C)	+70°C
T5 (>100°C)	+85°C
all other temperature classes	+100°C

AK assembly kit

The AK assembly kit is designed for assembling two, three or more filters together. It includes mounting brackets which can easily be attached to the wall or other structures.

The design of the assembly kit means it is universal and can be used for any filter types, including other brands.

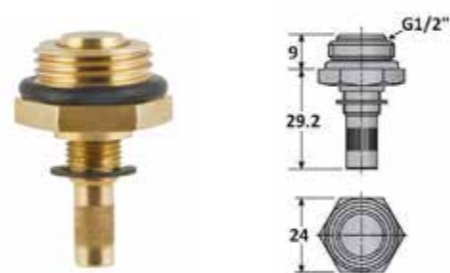


MCD - manual condensate drain

The MCD manual condensate drain has been developed for the simple discharging of condensate or any other non-aggressive fluid from compressed air system. In order to prevent condensate from becoming re-entrained in the airstream we recommend controlling the condensate level in filter bowl, with an automatic drain trap. MCD is easy to install on the filter housing.

Technical Data:

- material: brass
- operating temperature range: 1.5 to 65 °C (35 to 149 °F)
- operating pressure range: 0 – 20 bar (0 – 290 psi)
- connection: 1/2" bsp
- oil resistant o-ring



AOK 16B - Automatic Condensate Drain

AOK 16B is primarily used in filter housing bowls. Its task is the automatic discharge of condensate and oil. When the accumulated condensate exceeds to discharge level, the float rises, opens the outlet aperture, and discharges condensate from the system. A manual emergency drain function allows the operator to manually drain the filter, and confirm the automatic operation.

Technical Data:

- material: durable plastic, brass
- operating temperature range: 1.5 to 65 °C (35 to 149 °F)
- operating pressure range: 0 – 16 bar (0 – 232 psi)
- connection: 1/2" bsp
- oil resistant o-ring



ES Exhaust Silencer

The ES series exhaust silencers are designed for efficient noise reduction at a variety of applications where compressed air is vented to ambient pressure.

TECHNICAL DATA					
TYPE	Connection	Operating Pressure	Operating Temperature	Dimensions mm diameter	Dimensions mm height
ES 06050	1/4"	0-13 bar	1.5 to 65°C	51	69
ES 14050	3/8"			51	127
ES 12075	1/2"			75	131
ES 22075	3/4"			75	231
ES 22090	1"			90	231
ES 32090	1 1/4"			90	333
ES 32140	1 1/2"			140	336
ES 45140	2"			140	462



The AOK20B has been developed for fully automatic discharging of condensate or any other non-aggressive fluid from compressed air systems.

It is used when larger amounts of condensate (up to 300 l/h) must be automatically discharged from filters, pressure vessels and cyclone separators. It ensures reliable operation up to 20 bar (290 psig). The AOK20B is also equipped with separate manual drain function for testing or venting.



AOK 20B - Automatic Condensate Drain

Condensate accumulates in the aluminium reservoir. When the condensate exceeds the discharge level, the float rises, opens the discharge aperture and discharges condensate from the system without any air losses. We recommend:

- Install ball valve between pressure vessel and Y strainer.
- Install Y-strainer between ball valve and breather nipple.
- Install breather nipple with integral venting tube to avoid air locks.
- Nipple is screwed in inlet connection.

Technical Data:

- material: aluminium alloy
- operating temperature range: 1.5 to 65 °C (35 to 149 °F)
- operating pressure range: 0 – 20 bar (0 – 290 psi)
- connection: 1/2" bsp
- oil resistant o-ring



TD 16M

Timer Controlled Condensate Drain

The TD 16M timer controlled condensate drain range has been developed for reliable removal of condensate or other liquid from filters or pressure vessels in the compressed air system.

The TD16 M allows the user to discharge condensate for a controlled time and duration. Discharge intervals can be set with two adjustment knobs - discharge frequency and opening time.

TD drain is available in several types based on operating pressure and operating medium.

Benefits:

- easy opening time settings
- easy opening frequency settings
- no moving parts
- reliable operating without clogging and unaffected by outside conditions
- test button
- warning LED light for condensate disposal phase

Technical Data:

- min/max operating temperature: 1.5 to 65 °C (35 to 149 °F)
- min/max operating pressure: 0 - 16 bar / 0 - 232 psi
- input connection: R 1/2"
- output connection: R 1/8"
- output pipe diameter: 6-8 mm
- capacity at 10 bar (145 psi): 0.2 - 114 l/h
- mass: 0.35 kg



TECHNICAL DATA	TD16M	TD25M	TD150M	TD16MCR
Operating Pressure	16 bar (232 psi)	25 bar (362 psi)	150 bar (2175 psi)	16 bar (232 psi)
Supply voltage	230/240 volt	230/240 volt	230/240 volt	230/240 volt
Operating Temperature	1.5 - 65°C	1.5 - 65°C	1.5 - 65°C	1.5 - 65°C
Protection class	IP65	IP65	IP65	IP65
Coil power	18 VA (holding) 36 VA (inrush)	18 VA (holding) 36 VA (inrush)	18 VA (holding) 36 VA (inrush)	18 VA (holding) 36 VA (inrush)
Cable dimensions	3 x 0.75mm ²	3 x 0.75mm ²	3 x 0.75mm ²	3 x 0.75mm ²
Mass (cable + valve)	0.35 Kg	0.35 Kg	0.35 Kg	0.35 Kg
Mass (strainer)	0.23 Kg	0.23 Kg	0.23 Kg	0.23 Kg
Time OPEN (duration)	0.5 sec - 10 sec	0.5 sec - 10 sec	0.5 sec - 10 sec	0.5 sec - 10 sec
Time CLOSED (frequency)	0.5 min - 45 min	0.5 min - 45 min	0.5 min - 45 min	0.5 min - 45 min
Drain capacity @ 7 bar	95 l/hr	96 l/hr	97 l/hr	98 l/hr
Flow rate Kvs	2.4 l/min	1.5 l/min	0.7 l/min	3.4 l/min
Inlet connection	R 1/2" bsp	R 1/2" bsp	R 1/2" bsp	R 1/2" bsp
Outlet connection	R 1/4" bsp	R 1/4" bsp	R 1/4" bsp	R 1/4" bsp
Dimensions L x D x H mm	87.5 x 90.5 x 123	87.5 x 90.5 x 124	87.5 x 90.5 x 125	87.5 x 90.5 x 126
Medium	Air, water, oil	Air, water, oil	Air, water, oil	Aggressive fluids
Strainer option	yes	yes	no	no



EMD Series

Electronic Condensate Drains - 16 bar



The new generation of electronic condensate drains - EMD Series is used for the automatic discharge of accumulated condensate from compressed air systems.

The real advantage of the EMD 12 is contactless measurement by a precise capacitive level sensor. Condensate accumulates in the collecting reservoir which is detected by the sensor then discharged without the loss of valuable compressed air.

Condensate flow constantly flushes debris out of the valve which assures reliable operation.

In the rare event of debris blocking the valve, the first sign is incorrect plunger position. By detecting an incorrect position, the automatic 'blocked plunger release' procedure is started. This procedure assures safe and reliable plunger activation. No staff intervention is needed.

A version with Service Network for diagnostics parameter setting and alarm output is also available.

Benefits:

- compact design
- integrated strainer(easy access for cleaning)
- reliable direct acting, self cleaning valve
- test button
- warning LED light for condensate disposal phase
- horizontal or vertical installation
- PA housing



PATENTED VALVE TECHNOLOGY



EMD 12

TECHNICAL DATA	EMD 12	EMD 12C	EMD 25	EMD 75
Service network connection	X	Yes	X	X
Voltage	240		240	240
Fuse	5 x 20 1A T		5 x 20 1A T	5 x 20 1A T
Power	10 VA		24A	24A
Frequency	50 - 60 Hz		50 - 60 Hz	50 - 60 Hz
Operating Pressure range	0 - 16 bar (0 - 232 psi)		0 - 16 bar (0 - 232 psi)	0 - 16 bar (0 - 232 psi)
Drain capacity (at 7 bar/101 psi)	12 l/hr (0.007 cfm)		25 l/h	75 l/h
Operating temperature min/max	1.5 - 65°C		1.5 - 65°C	1.5 - 65°C
Inlet connection	G 1/2" bsp		G 1/2"	G 1/2"
Outlet connection	8 mmØ push-in		8 mmØ	8 mmØ
Protection class	IP 54		IP 54	IP 54
Mass	550g		900g	1.2 Kg

USE THE RELEVANT CLIMATE ZONE WHEN SIZING YOUR APPLICATION

	a	b	c
Peak compressor capacity (m ³ /min)	8.8	7.4	4.6
Peak dryer capacity (m ³ /min)	16.6	15.4	9.6
Peak filter capacity (m ³ /min)	55	46.2	28.7
	a	b	c
Peak compressor capacity (m ³ /min)	18.56	14.9	9.28
Peak dryer capacity (m ³ /min)	38.6	31	19.3
Peak filter capacity (m ³ /min)	116	93.1	58
	a	b	c
Peak compressor capacity (m ³ /min)	92.8	74.4	46.4
Peak dryer capacity (m ³ /min)	193.3	154.9	96.6
Peak filter capacity (m ³ /min)	580	465	290

CLIMATE ZONE

a	Dry inland	Also available in 24v
b	Coastal /temperate	
c	Tropical	



ECD-B Series

Electronic Condensate Drains – 16 bar



Electronic condensate drains – ECD-B series is used for the automatic discharge of accumulated condensate from compressed air systems.

The basic principle is a contactless measurement of the accumulated condensate which is then discharged without the loss of valuable compressed air.

Condensate flows constantly flush debris out of the valve, which is the main factor in providing trouble free operation.

If in the unlikely occurrence of a debris blockage, the unit detects if there is an incorrect plunger position, then it automatically initiates a plunger release procedure to self purge. No staff intervention is needed.

ECD-B Series is made of an aluminium housing with a plastic cover to protect the internal electronics from potentially harmful external conditions.

Benefits:

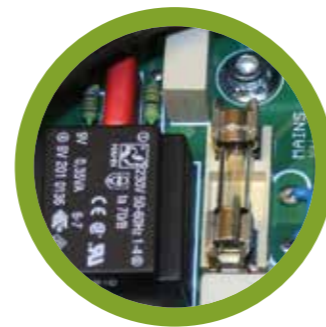
- Robust aluminium housing
- Integrated filter mesh
- Compact design
- Two-way connections
- Contactless measuring
- Direct acting, self cleaning valve (patented)
- Blocked plunger release procedure
- Operating diagnostic monitoring
- Warning LED light for “drain operating” and “alarm”

- AC versions (for DC version contact Technical department)
- IP 54 electrical protection

Operating Pressure: 0 – 16 bar

Inlet connection: 1/2”

Operating temp range: 1.5 to 65°C



TECHNICAL DATA	ECD 15B	ECD 40B	ECD 90B	ECD 150B
Drain capacity at 7 bar (101 psi)	15 l/hr	40 l/hr	90 l/hr	150 l/hr
Voltage	230/240			
Power	24 A			
Frequency	50 – 60 Hz			
Operating Pressure	0 - 16 bar (0 – 232 psi)			
Operating temperature range	1.5 – 65°C			
Inlet connection	R 1/2"bsp			
Outlet connection	R 1/8"bsp			
Power interface	3 x .75 mm ²			
Protection class	IP 54			
Mass Kg	0.9	0.9	1.05	1.15
Dimensions A x B x C	120 x 82 x 125	120 x 82 x 125	120 x 82 x 135	120 x 82 x 150

USE THE RELEVANT CLIMATE ZONE WHEN SIZING YOUR APPLICATION

	a	b	c	a	b	c	a	b	c
Peak compressor capacity (m ³ /min)	a	11.6	29.4	60.6	111.6				
	b	9.3	23.5	48.5	89.3				
	c	5.8	14.7	30.3	55.8				
Peak dryer capacity (m ³ /min)	a	23.2	58.8	121.2	223.2				
	b	18.6	47	97	178.6				
	c	11.6	29.4	60.6	111.6				
Peak filter capacity (m ³ /min)	a	116	294	606	1116				
	b	93	235	485	893				
	c	58	147	303	558				
Compressor motor (kW)		<30	<75	<160	<315				

CLIMATE ZONE

a	Dry inland
b	Coastal /temperate
c	Tropical

50 bar version also available



TAC Series

Activated Carbon Towers

The TAC activated carbon towers have been developed for removing oil vapours from compressed air (dry type separation).

The TAC series is made from high quality carbon steel. And the TACm series is made from aluminium. Both types are finished with powder coat epoxy. Flow distributors ensure uniform distribution of air flow through the activated carbon bed.

Oil vapours as well as some other hydrocarbons are separated due to adsorption process. Super fine coalescing filter is required upstream of the TAC and 1 µm dust filter is recommended downstream to intercept any activated carbon dust.

High pressure version is available on request.

CORRECTION FACTORS

To calculate the correct capacity of a given tower based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor(s).

TECHNICAL DATA													
Filter Housing Size	Inlet/Outlet		Operating Pressure		Flow Rate at 7 bar (g), 20°C		Dimensions (mm)			Total Weight	Activated Carbon	Volume	Cartridge Number
	Inch	bar	Nm³/h	cfm	A	B	C	kg	kg	litres			
TACm 6	3/8	16	6	3.5	404	164	120	3.5	0.5	1	1 x Ø80		
TACm 12	3/8	16	12	7.1	938	164	120	5.3	1	2	2 x Ø80		
TACm 23	3/8	16	24	14.1	1106	164	120	6.5	2	4	4 x Ø80		
TACm 35	3/8	16	36	21	1574	164	120	12	3	6	6 x Ø80		
TACm 56	1/2	16	60	35	1120	212	170	15	5.2	10.4	4 x Ø129		
TACm 70	1/2	16	75	44.1	1350	212	170	18	6.5	13	5 x Ø129		
TACm 105	1/2	16	105	61.8	1817	212	170	22	9.1	18.2	7 x Ø129		
TAC 10	3/4	16	100	59	1369	300	261	44	11	22	bulk		
TAC 18	1	16	175	103	1380	300	315	51	19	38	bulk		

CORRECTION FACTORS - PRESSURE															
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
Correctional Factor	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13

CORRECTION FACTORS - TEMPERATURE										
Operating temperature C	20	25	30	35	40	45	50	55	60	
Correction factor	1	0.998	0.97	0.92	0.86	0.75	0.6	-	-	

Quality class - solids (ISO 8573-1)	-
Quality class - water (ISO 8573-1)	-
Quality class - oils (ISO 8573-1)	0/1
Pressure drop -new element (mbar/psi)	20/0.29
Filter media	activated carbon
Residual oil vapour content (nominal)[mg/m³]	<0.003

Replace activated carbon every 12 months or sooner if required. Check residual oil content with test kit monthly



CORRECTED CAPACITY = NOMINAL FLOW CAPACITY x COP x COT

Operating pressure: 0 – 16 bar

Operating temp range: 1.5 to 45°C

Larger sizes ASME certified with capacity rated up to 1646 cfm are available.

WOS-M

Oil Separator Unit

Local environmental laws and regulations state that condensate drained from compressed air systems cannot be discharged to the sewage system due to the content of compressor lubricating oil.

WOS-M water oil separators have been developed to separate lubricant oil from condensate generated in compressed air systems.

The WOS-M is an oil separator unit with a disposable filter cartridge. Due to patented technology regular service can be done in 30 seconds without any cleaning. Separation begins in "cyclonic depressurization chamber" and continues in the "filter cartridge". Multi-stage separation process using oleophilic filters and activated carbon ensures exceptional performance and trouble free operation. When the "filter cartridge" is fully saturated you just simply unscrew the complete cartridge and replace it with a new one. All the condensate stays in the old cartridge which can also be sealed with plastic cover and disposed of according to local directives and laws.

ADVANTAGES

Easy installation due to compact design and small dimensions.

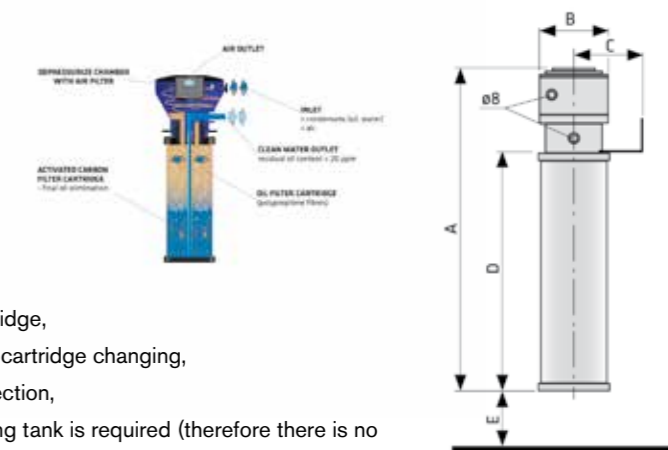
WOS-M series covers compressor capacities up to 4 m³/min.

Benefits:

- no complex sizing required,
- floor or wall installation,
- works with any type of condensate drain,
- can handle and separate any type of oil,
- oil residue value is less than 20 ppm,
- easy to maintain,
- disposable filter cartridge,
- quick and clean filter cartridge changing,
- quick coupling connection,
- no condensate settling tank is required (therefore there is no bacteria build-up),
- small compact design



PATENTED



TECHNICAL DATA: WOSm					DIMENSIONS (mm)					MASS
Filter Housing		Climate Zone a	Climate Zone b	Climate Zone c	A	B	C	D	E	Kg
WOSm1	Max oil adsorption [g]	740	650	370						
	Max FAD [Nm³/min]/[cfm]	1,23/43,05	1,08/37,8	0,62/21,9	483	106	80	335	50	1.21
	Max condensate flow [l/h]	0,57	0,90	1,91						
WOSm2	Max oil adsorption [g]	1520	1340	770						
	Max FAD [Nm³/min]/[cfm]	2,54/88,9	2,23/78,05	1,28/45,2	816	106	80	670	50	1.75
	Max condensate flow [l/h]	1,19	1,87	3,96						

CLIMATE ZONE			
a	Dry inland	15 °C	60% RH
b	Coastal /temperate	25 °C	60 % RH
c	Tropical	40 °C	100 % RH



WOS-20

Oil-Water Separator



Local environmental laws and regulations state that condensate drained from compressed air systems cannot be discharged to the sewage system due to the content of compressor lubricating oil.

The WOS is one of the most effective and economical oil-water separators. Multi-stage separation process using oleophilic filters and activated carbon, ensures exceptional performance and trouble free operation.

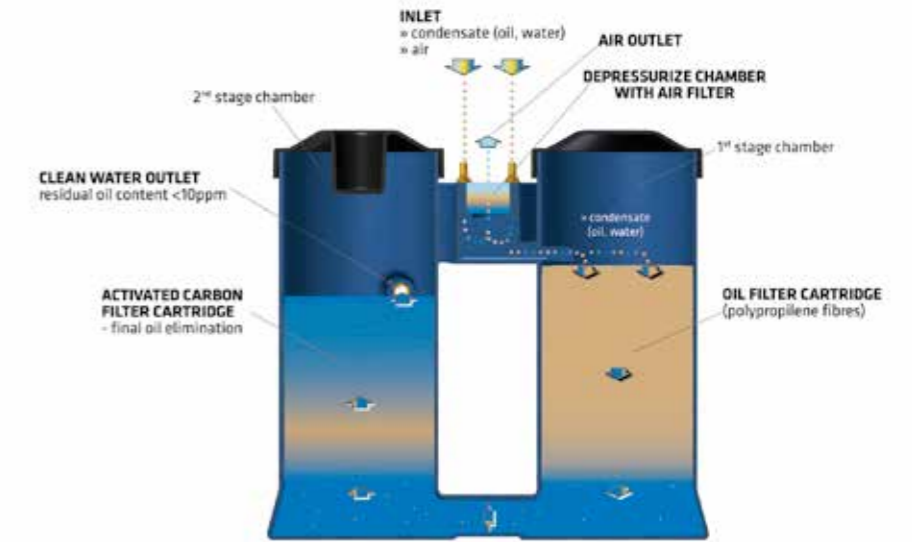
WOS series covers all compressor capacities up to 35 m³/min.

Benefits:

- no complex sizing required,
- simple to install,
- works with any type of condensate drain,
- can handle and separate any type of oil,
- oil residue value is less than 10 ppm,
- easy to maintain,
- no condensate settling tank is required (therefore there is no bacteria build-up),
- small compact design,
- test valve and test set included for sampling purposes.

Water quality test

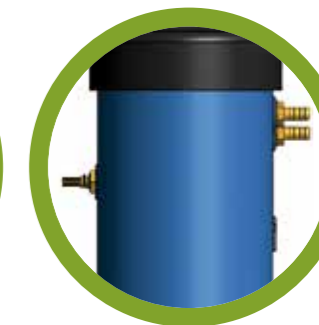
Water quality test should be performed at least once per month, to monitor the contamination level of disposed condensate. If oil concentration is reached, oil filter cartridges must be changed.



TECHNICAL DATA: WOS					DIMENSIONS (mm)			Filter Element
Filter Housing		Climate Zone a	Climate Zone b	Climate Zone c	A	B	C	
WOS-4	Max oil adsorption [g]	2,89	2,43	1,23				
	Max FAD [Nm ³ /min]/[cfm]	4,82/170	4,04/142	2,05/72,3	416	243	411	PP, AK WOS 4
	Max condensate flow [l/h]	2,3	3,4	6,3				
WOS-8	Max oil adsorption [g]	6,01	5,04	2,55				
	Max FAD [Nm ³ /min]/[cfm]	10,0/353	8,4/296	4,25/150	730	343	680	PP, AK WOS 8
	Max condensate flow [l/h]	4,7	7,1	13,1				
WOS-20	Max oil adsorption [g]	14,64	12,28	6,22				
	Max FAD [Nm ³ /min]/[cfm]	24,4/861	20,5/723	10,37/366	820	366	940	PP, AK WOS 20
	Max condensate flow [l/h]	11,4	17,2	32,0				
WOS-35	Max oil adsorption [g]	25,4	21,31	10,79				
	Max FAD [Nm ³ /min]/[cfm]	42,3/1495	35,5/1254	17,99/635	960	386	1137	PP, AK WOS 35
	Max condensate flow [l/h]	19,8	29,8	55,6				

CLIMATE ZONE

a	Dry inland	15 °C	60% RH
b	Coastal /temperate	25 °C	60 % RH
c	Tropical	40 °C	100 % RH



A-DRY

Desiccant Adsorption Dryer



The A-DRY desiccant adsorption dryer has been designed to separate water moisture from compressed air thus reducing the dew point in the system.

The A-DRY is a range of products that offers our customers a wide array of dried air solutions with volumetric flow rates ranging from 6 Nm³/h to 105 Nm³/h.

An innovative new design of A-DRY adsorption driers, developed with consideration for our customers, enables fast and reliable installation, use and servicing.

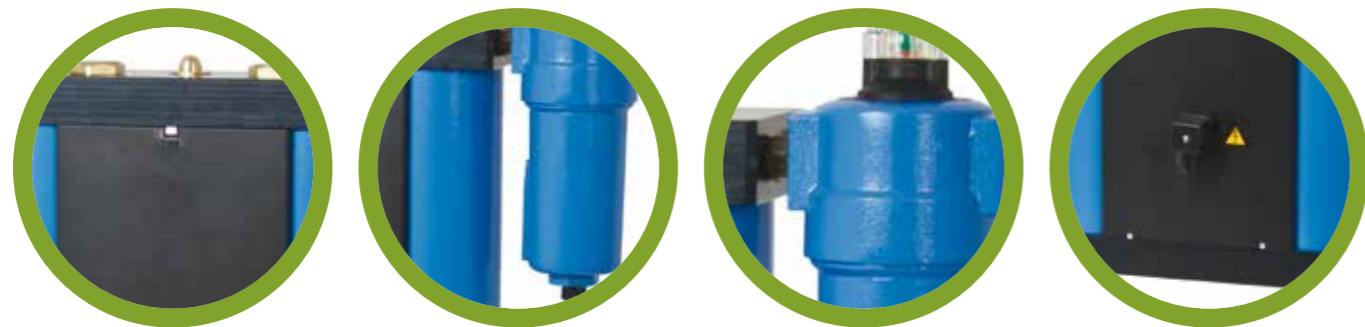
Installation is simple with our ready to use controller while minimising the number of parts and steps required for assembly and disassembly makes servicing fast and reliable.

Advantages:

- Wide range of products to fit your need.
- Robust and intuitive ready to use controller.
- Simple assembly and disassembly.
- Fast and reliable servicing.
- Adsorbent in cartridges for less mess and ease of use.
- Standard version includes coalescing pre-filter and particle afterfilter.



TECHNICAL DATA A-DRY ADSORPTION DRYER												
Filter Housing Model	Connection	Inlet Flow Rate		Outlet Flow Rate		Dimensions (mm)						Mass kg
		Inch	[Nm ³ /h]	cfm	[Nm ³ /h]	cfm	A	B	C	D	E	
A-DRY 06	G3/8	6	3.5	4.7	2.6	339	404	288	352	100	120	10.5
A-DRY 12	G3/8	12	7	9.4	5.3	573	638	288	352	100	120	13.5
A-DRY 24	G3/8	24	14.1	18.8	10.5	1041	1106	288	352	100	120	19
A-DRY 36	G3/8	36	21.1	28.2	15.8	1509	1574	288	352	100	120	27.5
A-DRY 60	G1/2	60	35.3	47	26.3	1041	1106	370	434	148	170	45
A-DRY 75	G1/2	75	44.1	58.8	32.8	1275	1340	370	434	148	170	53
A-DRY 105	G1/2	105	61.8	61.8	34.5	1743	1808	370	434	148	170	70
A-DRY 150	G 1	150	88.3	88.3	52	1345	145	440	815	198	240	170.5
A-DRY 200	G 1	200	117.7	117.7	69.3	1538	1648	440	815	198	240	182.2

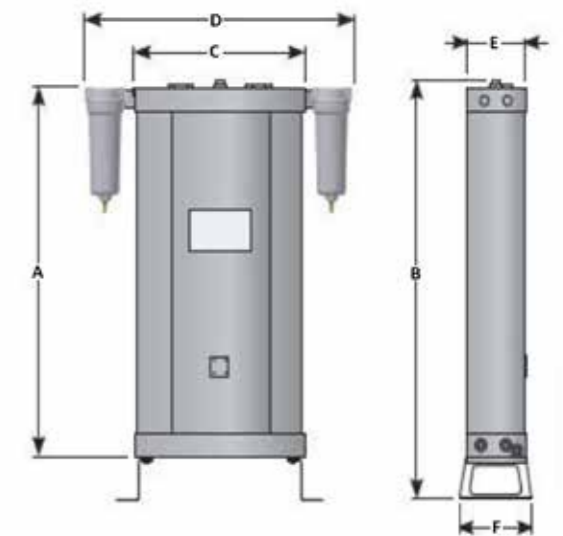


CORRECTION FACTORS													
Operating Pressure (bar)	4	5	6	7	8	9	10	11	12	13	14	15	16
Correctional Pressure (psi)	58	72	87	100	115	130	145	160	174	189	203	218	232
Correctional Factor F1	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13

CORRECTION FACTOR - TEMPERATURE F2							CORRECTION FACTOR - DEW POINT F3			
Inlet temperature	25	30	35	40	45	50	°C	-25	-40	-70
Correction factor F2	1	1	1	0.97	0.87	0.8	F3	1.1	1	0.7

TECHNICAL SPECIFICATIONS	
Pressure Range	4 –16 bar
Operating Temperature	1.5°C to 45°C
Pressure Dewpoints	-40°C (-25°C , -70°C)
Voltage, Frequency	230V, 50/60 Hz
Power consumption	<30 W
Protection class	IP 65
M Prefilter	0.1 borosilicate
S Final filter	0.01 borosilicate

CONSTRUCTION	
End caps	Aluminium
Columns, Side covers	Aluminium
Valves	Brass, Aluminium
Seals	NBR
Flexible connection	Nylon
Fittings, screws, plugs	Inox, Brass
Cartridges	Aluminium, Polyamide, aluminosilicate
Lubricant	Shell cassida RLS 2
External protection	Epoxy-polyester powder coat



B-DRY 110 - 1000

Heatless Regenerated Adsorption Dryer



The B-DRY 110-1000 adsorption dryers have been designed for continuous separation of water vapour from compressed air thus reducing dew point.

Operation of dryer consists of two columns operated alternately. Adsorption takes place under pressure in first column while second column regenerates with a portion of already dried compressed air at ambient pressure. A dryer consists of two columns, filled with desiccant beads, controller with LED display, valves, manometers, support construction and suitable filter housings with the required filter element. Proven robust design enables efficient and reliable operation, fast installation and simple maintenance.



DRYER RATING ACCORDING TO ISO 8573-1:

Solid particles: class 1

Water: class 1-3 (Class 2 when operated at nominal operating conditions)

Oil: class 1

PRESSURE EQUIPMENT DIRECTIVE

PED 97/23/CE (Fluid group 2) B-DRY 110 to B-DRY 300 Category 2 Module H

OPERATING TEMPERATURE								
°C	25	30	35	40	45	50	55	60
C_{ot}	1	1	1	0.97	0.87	0.8	0.64	0.51

DEW POINT			
°C	-25	-40	-70
C_0	1.1	1	0.7

CORRECTION FACTORS:

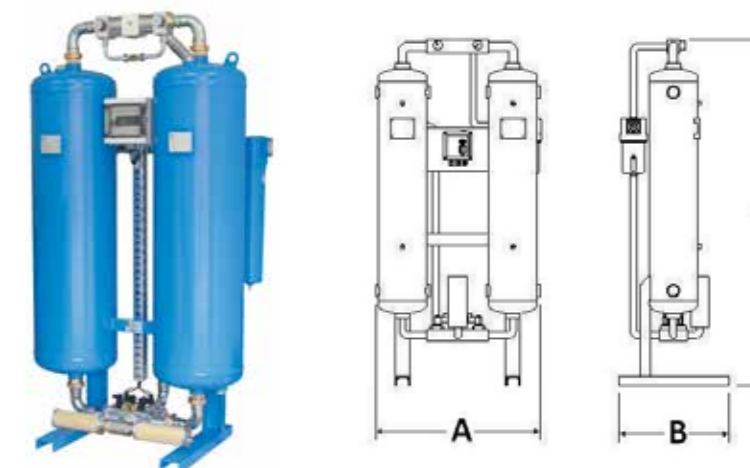
To calculate the correct capacity of a given filter based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor(s).

$$\text{CORRECTED CAPACITY} = \text{NOMINAL FLOW CAPACITY} \times C_{op} \times C_{ot} \times C_d$$

MAINTENANCE:

For maintenance, please follow operating manual. Check dryer operation weekly. Typical service interval:

- filter elements: every 12 months in operation or sooner if required
- silencers, valve components: every 24 months in operation or sooner if required
- desiccant: every 48 months in operation or sooner if required



TECHNICAL DATA B-DRY ADSORPTION DRYER															
Filter Housing Model	Connection	Inlet Flow Rate		Outlet Flow Rate		Dimensions (mm)			Mass		Volume				
		Inch	Nm³/h	cfm	Nm³/h	cfm	A	B	C	kg	litre				
B-DRY 110	G1"bsp	110	64.7	86	50.6	750	550	1500	126	20					
B-DRY 150	G1"bsp	150	88.3	117.5	69.2	750	550	1700	142	25					
B-DRY 200	G1"bsp	200	117.7	157	92.4	750	550	1750	180	35					
B-DRY 250	G1"bsp	260	153	204	120.1	750	550	1850	220	45					

OPERATING PRESSURE															
(bar)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
(psi)	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
Correctional Factor - C_{op}	0.38	0.5	0.63	0.75	0.88	1	1.13	1.25	1.38	1.5	1.63	1.75	1.88	2	2.13

TECHNICAL SPECIFICATIONS	
Pressure Range	4 – 16 bar
Operating Temperature	1.5°C to 45°C
Pressure Dewpoints	-40°C (-25°C , -70°C)
Voltage, Frequency	230V, 50/60 Hz
Power consumption	<60 W
Protection class (controller)	IP 65
S Prefilter	0.01 borosilicate
R Final filter	Dust 1µm

CONSTRUCTION	
General construction	Steel
External protection	Powder coat Epoxy- polyester
Dessicant support screen	Stainless steel
Valves	Brass, Aluminium
Seals	NBR
Fittings	IP 65
Lubricant	Shell Cassida grease RLS 2
Dessicant	80% Molecular sieve 4A, 20% Silica gel





masters of the air



NATIONAL STOCK AVAILABLE



Distributed by

Falcon Compressed Air Treatment
Email: sales@falconfiltration.com.au
Phone 1300 139 559 Fax 1300 139 599
www.falconfiltration.com.au