



# High efficiency compressed air filtration & water separation



Innovative Compressed Air Purification

**CF & X RANGE**

# A filter range you can trust

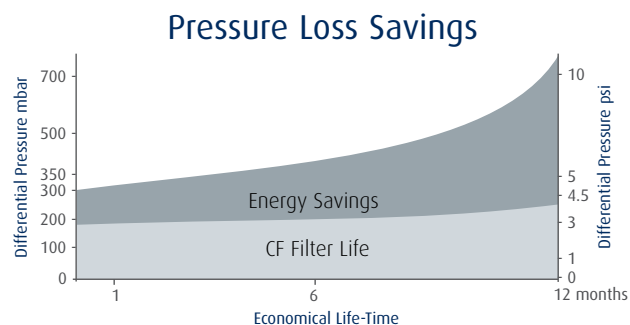
**The reliability of compressed air filtration is paramount to the ongoing fight against problems caused through contamination entering the air system. Contamination in the form of dirt, oil and water can lead to:**

- Pipescale and corrosion within pressure vessels
- Damage to production equipment, air motors, air tools, valves and cylinders
- Premature and unplanned desiccant replacement for adsorption dryers
- Spoiled product

The CompAir filtration range offers various products and grades of filtration to provide peace of mind whatever the air quality requirement.

## CompAir filtration solutions that pay off

CompAir's commitment to providing energy efficient products does not end with the compressor ranges. The air treatment products are perfectly balanced to provide compressed air users with a wide choice of products to gain the right level of performance with optimum energy savings.



Choose CompAir filters to protect your production processes with reduced energy consumption, CO<sub>2</sub> emissions and operational costs.

## Innovative features mean outstanding performance without compromise

With differential pressure that starts low and stays low, these filters offer a solution to people who want high performance filtration without the usual high energy running costs. Independently verified by Llyods Register using ISO12500 and ISO8573 test methods, these products either meet or exceed the requirements of ISO8573-1.

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The CompAir filter range has been constantly innovated and has become a leading technology, providing the exact balance between air quality, energy efficiency and low lifetime costs.

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## Compressed Air Purification – The perfect choice!

### Water Separation – The X-Range of water separators

The X-range of water separators provide bulk condensed water and liquid oil removal and are used to protect coalescing filters against bulk liquid contamination.

**0.6 – 421 m<sup>3</sup>/min\***

**21 – 14885 cfm\***



### Filtration – The CF-Range of cast filters

The CF-range of filters efficiently removes water and oil aerosols, atmospheric dirt and solid particles, rust, pipescale and micro-organisms.

**0.6 – 60 m<sup>3</sup>/min\***

**21 – 2119 cfm\***



Compressed air contamination will ultimately lead to:

- ▼ Inefficient production processes
- ▼ Spoiled, damaged or reworked products
- ▼ Reduced production efficiency
- ▼ Increased manufacturing costs

### Filtration – The CF-Range of flanged filters

For larger flowrate or higher pressure applications the flanged filters are available in the standard five filtration grades.

**37 – 521 m<sup>3</sup>/min\***

**1312 – 18380 cfm\***

\* Flow rate at 25° C, 7 bar





# Energy savings without compromised performance

## High efficiency bulk liquid removal

Water separators remove bulk liquids such as condensate, water and liquid oil from the air flow through directional and centrifugal separation. Installed before a coalescing filter the water separator can provide added protection against bulk liquid contamination enabling the filter to operate more efficiently. The X water separator range from CompAir can operate across various flow conditions and have been optimised to reduce differential pressure with very low maintenance.



## Air quality and energy efficiency through design

The benefit of energy saving without compromised performance is achieved through a number of unique and patented design features which minimise differential pressure.

The CompAir cast filter range combine filter housing and element to work together in maximising energy savings and provide low lifetime costs without compromising on air quality.

The CompAir cast filter housings provide many features leading to direct benefits.

Large range of port sizes to match both pipe size and system flow rate to simplify installation and remove the need for expensive adaptors and fittings.

Large range of filtration grades to match the applications air quality needs.





Annual service is easy and clean to carry out thanks to and easy to grip housing bowl and no need for the user to directly handle the contaminated element.

Filter housings are guaranteed for 10 years against corrosion providing increased safety and peace of mind.

## High efficiency even at high flow rates

Designed in accordance with ASME VIII Div 1 from carbon steel, the CompAir fabricated filter range can operate at higher flow rates up to 421 m<sup>3</sup>/min (14885 cfm) with high filtration performance. Generous flanged connections and element design features provide a starts low stays low differential pressure which leads to lifetime energy savings and excellent product performance.

These filters utilise a unique filter element which allows for quick and easy maintenance, pleated element technology gives increases filtration and a special drainage layer ensures all coalesced liquids are removed.



## To meet varying requirements, CompAir filters are available in three filter grades:

### Type B: General Purpose Protection

Particle removal down to 1 micron, including water and oil aerosols. Maximum remaining oil aerosol content:

0.6 mg / m<sup>3</sup> at 21 °C / 0.5 ppm(w) at 70 °F.

### Type C: High Efficiency Oil Removal Filtration & High Efficiency Dust Filtration

Particle removal down to 0.01 micron, including water and oil aerosols. Maximum remaining oil aerosol content:

0.01 mg / m<sup>3</sup> at 21 °C / 0.01 ppm(w) at 70 °F.

### Type D: Oil Vapour & Odour Removal

Maximum remaining oil vapour content:

0.003 mg / m<sup>3</sup> at 21 °C / 0.003 ppm(w) at 70 °F.

# Increased productivity and profitability through regular maintenance

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By guaranteeing air quality and ensuring energy consumption is kept to a minimum, CompAir purification products can reduce the total cost of ownership and help improve profitability through improved manufacturing efficiencies.

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## Options & Accessories



### Filter fixing kits

Fixing clamp allows quick and simple connection of multiple filter housings.

### Filter mounting brackets

Mounting brackets provide additional support to filters installed in flexible piping systems or OEM equipment.

### Incident monitor

Used to indicate premature high differential pressure. The Indicator can be retrofitted to existing housings without depressurising the system.



## Maintaining air quality and energy efficiency through regular maintenance

Filters are installed to provide contaminant removal to a specific air quality requirement, therefore the primary reason to change filter elements should always be to maintain air quality and they should therefore be replaced every 12 months.

## The benefits of annual filter element changes

- Guaranteed optimised performance
- Air quality continues to meet international standards
- Protection of downstream equipment, personnel and processes
- Low operational costs
- Increased productivity and profitability
- Continued piece of mind



Float drain



Electronic drain

### Choice of drains

Manual, float and electronic drain option available. Easy connection with standard fittings via 1/2" threaded drain port.



## Technical Data - Compressed Air Condensate Separators - X Series

Separator Type <sup>3)</sup> including float drain	Port Size ISO228-1 BSPP	Air Flow Rates m³/min cfm					Length mm / in	Height mm / in	Depth mm / in	Weight kg / lbs					
		5 bar / 72 psi	7 bar / 100 psi	9 bar / 130 psi	10 bar / 145 psi	13 bar / 190 psi									
X006G1/4	¼"	0.45 / 15.9	0.60 21.2	0.71 25.2	0.75 26.5	0.84 29.9	76 / 3.0	181.5 / 7.2	64 / 2.5	0.6 / 1.3					
X006G3/8	⅜"														
X006G1/2	½"														
X024G3/8	⅜"	1.80 / 63.8	2.40 / 84.8	2.86 / 101	3.00 / 106	3.38 / 119	97.5 / 3.8	235 / 9.3	84 / 3.3	1.1 / 2.4					
X024G1/2	½"														
X024G3/4	¾"														
X024G1	1"	4.96 / 175	6.60 / 233	7.86 / 278	8.25 / 291	9.29 / 328	129 / 5.1	275 / 10.8	115 / 4.5	2.2 / 4.8					
X066G3/4	¾"														
X066G1	1"														
X066G11/4	1 ¼"	15.79 / 558	21.0 / 742	25.0 / 883	26.25 / 928	29.58 / 1045	170 / 6.7	432 / 17	156 / 6.1	5.1 / 11.2					
X066G11/2	1 ½"														
X210G11/4	1 ¼"														
X210G11/2	1 ½"	36.09 / 1275	48.0 / 1696	57.1 / 2019	60.0 / 2120	67.6 / 2389	205 / 8.1	504 / 19.9	181 / 7.1	10 / 22					
X210G2	2"														
X480G21/2	2 ½"														
X480G3	3"														
Flange housing	Port Size	5 bar		7 bar		9 bar		10 bar		13 bar		Length	Height	Depth	Weight
		m³/min	CFM	m³/min	CFM	m³/min	CFM	m³/min	CFM	m³/min	CFM	mm / in	mm / in	mm / in	kg / lb
X480GF	DN80	41	1441	48	1695	54	1915	57	2017	65	2305	370 / 14.6	1070 / 42.1	285 / 11.2	66 / 146
X600GF	DN100	51	1801	60	2119	68	2394	71	2522	82	2882	450 / 17.7	1120 / 44.1	340 / 13.4	102 / 225
X1080GF	DN150	92	3242	108	3814	122	4310	129	4539	147	5187	580 / 22.8	1240 / 48.8	460 / 18.1	191 / 434
X1800GF	DN200	153	5556	180	6537	203	7387	214	7779	245	8890	750 / 29.5	1585 / 62.4	640 / 25.2	397 / 875
X2880GF	DN250	245	8645	288	10171	325	11493	343	12103	392	13833	862 / 33.9	1570 / 61.8	715 / 28.2	537 / 1184
X4320GF	DN300	358	12652	421	14885	476	16820	501	17713	573	20244	1000 / 39.4	1610 / 63.4	840 / 33.1	675 / 1488

<sup>1)</sup> supplied with float drain / optional zero loss drain. For pressures of 16 to 20 bar (g) an alternative drain must be used.

## Technical Data - Compressed Air Filter - CF Series

Filter Model CF_G Port & Grade B_C_D		Port Size ISO228-1 BSPP	Air Flow Rates <sup>1)</sup> m <sup>3</sup> /min cfm					Length mm / in	Height mm / in	Depth mm / in	Weight kg / lbs	Replacement Element CF_G Port & Grade B_C_D					
		5 bar 72 psi	7 bar 100 psi	9 bar 130 psi	10 bar 145 psi	13 bar 190 psi											
CF0006G1/4 (Grade)		G1/4"	0.51 18.0	0.6 21.2	0.68 24.0	0.71 25.2	0.82 28.8	76.0 / 3.0	181.5 / 7.12	64 / 2.5	0.6 / 1.3	CE0006G B_C_D					
CF0006G3/8 (Grade)		G3/8"															
CF0006G1/2 (Grade)		G1/2"															
CF0012G3/8 (Grade)		G3/8"	1.02 36.0	1.20 42.4	1.36 47.9	1.43 50.5	1.63 57.7	97.5 / 3.8	235 / 9.3	84 / 3.3	1.1 / 2.4	CE0012G B_C_D					
CF0012G1/2 (Grade)		G1/2"															
CF0018G1/2 (Grade)		G1/2"	1.53 54.1	1.80 63.6	2.03 71.9	2.14 75.7	2.45 86.5	97.5 / 3.8	235 / 9.3	84 / 3.3	1.1 / 2.4	CE0018G B_C_D					
CF0018G3/4 (Grade)		G3/4"															
CF0018G1 (Grade)		G1"															
CF0036G3/4 (Grade)		G3/4"	3.06 108	3.60 127	4.07 144	4.28 151	4.90 173	129.0 / 5.1	274.8 / 10.8	115 / 4.5	2.2 / 4.8	CE0036G B_C_D					
CF0036G1 (Grade)		G1"															
CF0066G1 (Grade)		G1"	5.61 198	6.60 233	7.46 263	7.85 277	8.98 317	129.0 / 5.1	364.3 / 14.3	115 / 4.5	2.7 / 5.9	CE0066G B_C_D					
CF0066G11/4 (Grade)		G1 1/4"															
CF0066G11/2 (Grade)		G1 1/2"															
CF0096G11/4 (Grade)		G1 1/4"	8.16 288	9.60 339	10.8 383	11.4 404	13.1 461	170.0 / 6.7	432.5 / 17.0	156 / 6.1	5.1 / 11.2	CE0096G B_C_D					
CF0096G11/2 (Grade)		G1 1/2"															
CF0132G11/2 (Grade)		G1 1/2"	11.22 396	13.20 466	14.92 527	15.71 555	17.95 634	170.0 / 6.7	524.5 / 20.6	156 / 6.1	5.7 / 12.5	CE0132G B_C_D					
CF0132G2 (Grade)		G2"															
CF0198G2 (Grade)		G2"	16.83 595	19.80 670	22.37 791	23.56 833	26.93 951	170.0 / 6.7	524.5 / 20.6	156 / 6.1	5.7 / 12.5	CE0198G B_C_D					
CF0258G21/2 (Grade)		G2 1/2"	21.93 775	25.8 912	29.15 1030	30.70 1085	35.09 1240	204.8 / 8.1	641.6 / 25.3	181 / 7.1	11.1 / 24.4	CE0258G B_C_D					
CF0258G3 (Grade)		G3"															
CF0372G21/2 (Grade)		G2 1/2"	31.62 1117	37.20 1314	42.04 1485	44.27 1564	50.59 1788	204.8 / 8.1	832.1 / 32.8	181 / 7.1	13.9 / 30.6	CE0372G B_C_D					
CF0372G3 (Grade)		G3"															
CF0600G4 (Grade)		G4"	51.0 1802	60 2120	67.8 2396	71.4 2523	81.6 2883	840 / 16.5	1694 / 33.3	282 / 11.1	44.5 / 98.1	3 x CE0600N B_C_D-F					
Fabricated Housing <sup>2)</sup>		Port Size	5 bar		7 bar		9 bar		10 bar		13 bar		Length	Height	Depth	Weight	Replacement Element
			m <sup>3</sup> /min	CFM	m <sup>3</sup> /min	CFM	m <sup>3</sup> /min	CFM	m <sup>3</sup> /min	CFM	m <sup>3</sup> /min	CFM	mm / in	mm / in	mm / in	kg / lb	
CF0372G (GRADE) F		DN80	32	1115	37	1312	42	1483	44	1561	51	1784	440 / 17.3	1065 / 42	340 / 13.4	70 / 154	1 X CE0372 (GRADE)
CF0744G (GRADE) F		DN100	63	2231	74	2625	84	2966	89	3124	101	3570	500 / 19.7	1152 / 45.4	405 / 16	97 / 214	2 X CE0372 (GRADE)
CF1116G (GRADE) F		DN150	95	3347	112	3938	126	4450	133	4686	152	5356	600 / 23.6	1256 / 49.5	520 / 20.5	148 / 326	3 X CE0372 (GRADE)
CF1488G (GRADE) F		DN150	126	4463	149	5251	168	5934	177	6249	202	7141	650 / 25.6	1332 / 52.4	580 / 22.8	187 / 412	4 X CE0372 (GRADE)
CF2232G (GRADE) F		DN200	190	6695	223	7877	252	8901	266	9374	304	10713	750 / 29.5	1415 / 55.7	640 / 25.2	240 / 529	6 X CE0372 (GRADE)
CF3720G (GRADE) F		DN250	316	11160	372	13129	420	14836	443	15624	506	17855	1000 / 39.4	1603 / 63.1	840 / 33	470 / 1036	10 X CE0372 (GRADE)
CF5208G (GRADE) F		DN300	443	15623	521	18380	589	20769	620	21872	708	24997	1050 / 41.3	1706 / 57.2	910 / 35.8	580 / 1279	14 X CE0372 (GRADE)

<sup>1)</sup> For flowrates at other pressures, apply the correction factor shown.  
<sup>2)</sup> Fabricated housings flanged to BS 4504 PN16 and designed to CEN 286 Part 1 (1991). Other pressure vessel standards available.  
<sup>3)</sup> supplied with float drain / optional electronic drain  
<sup>4)</sup> supplied with manual drain

CF Filter Grade	Temperature Range		Initial Differential Pressure		Filtration	Pressure Max. bar / psi	Recommended Temperature
	C / F		Dry mbar / psi	Wet mbar / psi			
B <sup>3)</sup>	1.5 - 66 / 35 - 150		70 / 1	140 / 2	Wet	16 / 232	1.5 - 80 / 35-176
C <sup>3)</sup>			100 / 1.5	200 / 3			
D <sup>4)</sup>	1.5 - 50 / 35 - 122		70 / 1		Dry	20 / 290	1.5 - 50 / 35 - 122

Line Pressure	bar g	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	psi g	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232
Correction Factor		0.38	0.53	0.65	0.76	0.85	0.93	1.00	1.07	1.13	1.19	1.25	1.31	1.36	1.41	1.46	1.51

# Global experience – truly local service

With over 200 years of engineering excellence, the CompAir brand offers an extensive range of highly reliable, energy efficient compressors and accessories to suit all applications.

An extensive network of dedicated CompAir sales companies and distributors across all continents provide global expertise with a truly local service, ensuring our advanced technology is backed up with the right support.

As part of the worldwide Gardner Denver operation, CompAir has consistently been at the forefront of compressed air systems development, culminating in some of the most energy efficient and low environmental impact compressors on the market today, helping customers achieve or surpass their sustainability targets.



## CompAir compressed air product range

### Advanced Compressor Technology Lubricated

- Rotary Screw
  - > Fixed and Regulated Speed
- Piston
- Portable

### Oil-Free

- Water Injected Screw
  - > Fixed and Regulated Speed
- Two Stage Screw
  - > Fixed and Regulated Speed
- Piston
- High Speed Centrifugal - Quantima®

### Complete Air Treatment Range

- Filter
- Refrigerant and Desiccant Dryer
- Condensate Management
- Heat of Compression Dryer
- Nitrogen Generator

### Modern Control Systems

- CompAir DELCOS Controllers
- SmartAir Master Sequencer

CompAir policy is one of continuous improvement and we therefore reserve the right to alter specifications and prices without prior notice. All products are sold subject to the Company's conditions of sale.

### Value Added Services

- Professional Air Audit
- Performance Reporting
- Leak Detection

### Leading Customer Support

- Custom Engineered Solutions
- Local Service Centres
- Genuine CompAir Parts and Lubricants

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