



High efficiency compressed  
air filtration & water separation



Truly Innovative Compressed Air Purification

**CF & X RANGE**

# A filter range you can trust

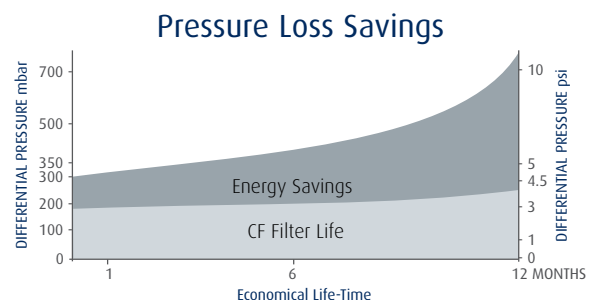
**The reliability of compressed air filtration is paramount to the ongoing fight against problems caused through contamination entering the air system. Contamination in the form of dirt, oil and water can lead to:**

- 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 – 432 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.

26 – 469 m<sup>3</sup>/min\*

911 – 16528 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 469 m<sup>3</sup>/min (16528 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.



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.

## 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



## CompAir - Technical Data - Water Separators - Compressed Air - Condensate Separators X G/F- 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	1/4"	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	3/8"									
X006G1/2	1/2"									
X024G3/8	3/8"	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	1/2"									
X024G3/4	3/4"									
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	3/4"									
X066G1	1"									
X066G11/4	1 1/4"	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 1/2"									
X210G11/4	1 1/4"									
X210G11/2	1 1/2"	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 1/2"									
X480G3	3"									
Flange housing										
X600F	DN100	45.1 / 1594	60.0 / 2120	71.4 / 2524	75.0 / 2650	85 / 2986	450 / 17.7	1120 / 44.1	340 / 13.4	102 / 225
X1080F	DN150	81.2 / 2869	108 / 3816	129 / 4543	135 / 4770	152 / 5375	580 / 22.8	1240 / 48.8	460 / 18.1	191 / 434
X1800F	DN200	135.3 / 4782	180 / 6360	214 / 7572	225 / 7951	254 / 8958	750 / 29.5	1585 / 62.4	640 / 25.2	397 / 875
X2880F	DN250	216.5 / 7652	288 / 10177	343 / 12115	360 / 12721	406 / 14333	862 / 33.9	1570 / 61.8	715 / 28.2	537 / 1184
X4320F	DN300	324.8 / 11477	432 / 15265	514 / 18173	540 / 19081	608 / 21500	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.

## Compair - 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"	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
CF0012G3/8 (Grade)	G3/8"										
CF0012G1/2 (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
CF0018G1/2 (Grade)	G1/2"										
CF0018G3/4 (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
CF0036G1/2 (Grade)	G1/2"										
CF0036G1 (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
CF0066G1 (Grade)	G1"										
CF0066G11/4 (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>											
CF0258NB (Grade)	DN80	22 775	26 912	29 1030	31 1085	35 1240	370 / 14.6	1000 / 39.4	285 / 11.2	60 / 132	CE0258N B_C_D-F
CF0372NB (Grade)	DN80	32 1117	37 1314	42 1485	44 1564	51 1788	370 / 14.6	1220 / 48.0	285 / 11.2	70 / 154	CE0372N B_C_D-F
CF0600NB (Grade)	DN100	51 1802	60 2120	68 2396	71 2523	82 2883	500 / 19.7	1345 / 53.0	405 / 15.9	145 / 320	3 x CE0600N B_C_D-F
CF0780NB (Grade)	DN100	66 2343	78 2756	88 3114	93 3280	106 3748	500 / 19.7	1345 / 53.0	405 / 15.9	145 / 320	4 x CE0600N B_C_D-F
CF1170NB (Grade)	DN150	99 3514	117 4134	132 4672	139 4920	159 5623	580 / 22.8	1440 / 56.7	460 / 18.1	190 / 420	6 x CE0600N B_C_D-F
CF1950NB (Grade)	DN200	166 5857	195 6890	220 7786	232 8200	265 9371	750 / 29.5	1710 / 67.3	640 / 25.1	375 / 827	10 x CE0600N B_C_D-F
CF3120NB (Grade)	DN250	265 9371	312 11025	353 12458	371 13119	424 14994	962 / 33.9	1840 / 72.4	715 / 28.1	495 / 1090	16 x CE0600N B_C_D-F
CF4680NB (Grade)	DN300	398 14057	468 16537	529 18687	557 19679	636 22490	1000 / 39.4	1930 / 76.0	840 / 33.1	600 / 1323	24 x CE0600N B_C_D-F

<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	Initial Differential Pressure		Filtration	Pressure Max. bar / psi	Recommended Temperature
	dry mbar / psi	wet mbar / psi			
B <sup>3)</sup>	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>	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
Correction Factor	psi g	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232

# Innovative products & services

Trust CompAir to supply intelligent compressed air solutions



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 Dryer
- Desiccant Dryer
- Condensate Management
- Heat of Compression Dryer

### 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

- Air Audit
- Performance Reporting
- Leak Detection

### Leading Customer Support

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