



# Compressed Air Duplex Filters

Models | D3028XAC to D3109XAC  
Flow 25 SCFM (42 Nm<sup>3</sup>/hr) to 175 SCFM (297 Nm<sup>3</sup>/hr)

**The Alpha Duplex range delivers an economical, space-saving filtration solution. With exceptionally improved performance, the intelligent design combines a two-stage filtration system in a single unit, ensuring twice the filtration capability.**

Available in a range of 7 models with connection sizes ranging from ¼" - 1" , the Alpha Duplex Filter's space saving modular design utilizes deep pleated media technology to deliver market leading performance.

The 0.01 micron (DXA grade) element delivers exceptional results in oil aerosol removal and particle retention - with a significantly reduced differential pressure of <1.8 psi. The Activated Carbon (DAC) element utilizes a finely divided activated carbon media to remove odors and tastes.

Market leading differential pressure of <1.8 psi across DXA grade



#### Filtration Technology

Alpha deep pleated media technology delivers a step change in performance



#### Two-Stage Filtration

DXA and DAC elements for double the filtration performance



#### Modular Construction

Low cost connecting kits enable easy close coupling assembly

- **Flow-Optimized Design** Advanced filter head design for optimized flow performance
- **Flexible Installation** Modular design and accessible fixings enable simple close coupling assembly
- **Market Leading Performance** Custom engineered filtration media delivers optimum performance in line with air quality standard ISO 8573-1: 2010
- **Simplified Serviceability** Profiled bowl design and push fit elements ensure quick and reliable maintenance
- **Product Safety in Mind** Guaranteed safe housing closure with rotational safety stop
- **Corrosion Protection** Internal and external electrophoretic paint finish followed by a tough exterior polyester powder coating



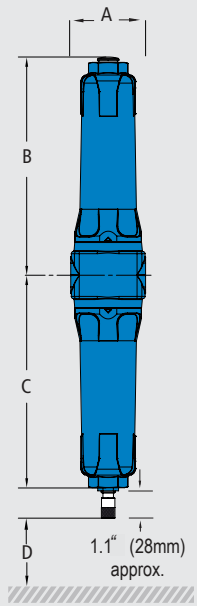


For further information please call: **+1 814 836 2900**

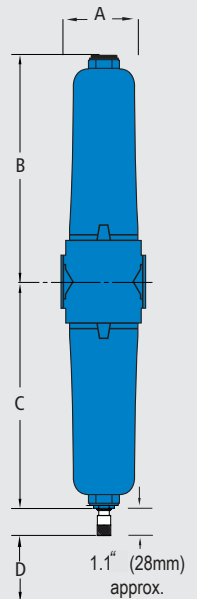
# Technical Specification

Filter model	Pipe size inches	Inlet flow rate*		Dimensions inches (mm)				Weight		Element model Coalescing	Element model Activated Carbon	No. of Elements
		SCFM	Nm/hr	A	B	C	D	lbs	kg			
D3028XAC	1/4	25	42	2.76 (70)	7.83 (199)	8.03 (204)	2.76 (70)	2.2	1.0	E30408DXA / E30408DAC		1/1
D3038XAC	3/8	32	54	2.76 (70)	7.83 (199)	8.03 (204)	2.76 (70)	2.2	1.0	E30408DXA / E30408DAC		1/1
D3058XAC	1/2	50	85	2.76 (70)	7.83 (199)	8.03 (204)	2.76 (70)	2.4	1.1	E30412DXA / E30412DAC		1/1
D3059XAC	1/2	70	119	3.94 (100)	9.29 (236)	9.45 (240)	3.15 (80)	5.1	2.3	E30613DXA / E30613DAC		1/1
D3078XAC	3/4	85	144	3.94 (100)	9.29 (236)	9.45 (240)	3.15 (80)	5.1	2.3	E30613DXA / E30613DAC		1/1
D3079XAC	3/4	125	212	3.94 (100)	14.02 (356)	14.17 (360)	3.15 (80)	6.8	3.1	E30625DXA / E30625DAC		1/1
D3109XAC	1	175	297	3.94 (100)	14.02 (356)	14.17 (360)	3.15 (80)	7.1	3.2	E30625DXA / E30625DAC		1/1

\* Rated flow at 100 psig (7 barg), reference conditions at 14.5 psi (a) (1 bar (a)) 68°F (20°C)



D3028XAC - D3058XAC



D3059XAC - D3109XAC

Grade	DXA		DAC	
Particle removal	0.01 micron		0.01 micron	
Maximum particle size class**	1		1	
Maximum oil content**	1		1	
Maximum oil carryover at 68°F (20°C)	0.01 ppm	0.01 mg/m <sup>3</sup>	0.003 ppm	0.003 mg/m <sup>3</sup>
Pressure loss: clean and dry	1.2 psi	85 mbar	1.1 psi	75 mbar
Pressure loss: saturated	1.8 psi	125 mbar	N/A	N/A
Pressure loss: element change	12 months	8000 hours	at least every 6 months	
Maximum temperature	122°F	50°C	122°F ***	50°C ***
Maximum working pressure	<sup>232</sup> psig	16 barg	<sup>232</sup> psig	16 barg
Element end cap color	Black		Black	

\*\* to ISO 8573-1: 2010 \*\*\* Maximum recommended operating temperature 77°F (25°C)

Pressure correction factors	For maximum flow rate, multiply model flow rate by the correction factor corresponding to the minimum operating pressure									
Operating pressure psig (barg)	58 (4)	72 (5)	87 (6)	100 (7)	115 (8)	145 (10)	174 (12)	203 (14)	232 (16)	300 (20.7)
100 psig - correction factor	0.76	0.84	0.92	1.00	1.07	1.19	1.31	1.41	1.51	1.73

## Technical notes

- Duplex Filters provide a 0.01 micron (DXA) grade element in the lower section for oil removal, while the Activated Carbon (DAC) grade element in the upper section is for odor removal.
- Direction of air flow is inside to out through the 0.01 micron (DXA) grade and outside to in through Activated Carbon (DAC) grade filter element.
- Duplex Filters are fitted with ADVS16 normally open float operated automatic drain valves as standard. Normally closed float operated automatic drain valves ADVS16C are available for low flow applications - see price guide.
- Activated Carbon Filters must not operate in oil saturated conditions and will not remove certain types of gases including carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>).
- Alpha Filters are manufactured from cast aluminum alloy and are PED 2014/68/EU compliant for group 2 gases.
- Threaded connections are NPT to ANSI/ASME B1.20.1. RP (BSP Parallel) to ISO 7-1 and RC (BSP Taper) to ISO 7-1 are also available upon request.
- Filters are suitable for use with mineral and synthetic oils plus oil-free compressed air applications.
- Mounting brackets are available for all models - see price guide.

