

The ultimate filtration & drying technology

Compressed Air Duplex Filters

Models | D3028 to D3109

Flow Rates 25 SCFM (42 Nm³/hr) to 175 SCFM (297 Nm³/hr)

The Alpha Duplex range delivers an economical, spacesaving filtration solution. With exceptionally improved performance, the intelligent design combines a twostage filtration system in a single unit, ensuring twice the filtration capability.

Available in a range of 7 models with connection sizes ranging from 1/4" - 1", the Alpha Duplex Filters space saving modular design utilises 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 <125 mbar. The Activated Carbon (DAC) element utilises a finely divided activated carbon media to remove odours and tastes.



NEW 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-Optimised Design Advanced filter head designed for optimised flow performance
- Flexible Installation Filter housings can be multi-banked together using connecting kits enabling simple close coupling assembly
- Market Leading Performance Pleated oleophobic borosilicate media delivers significant energy cost savings through lower differential pressure
- Simplified Serviceability Profiled bowl design and unique 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



Differential pressure of <125 mbar across DXA grade

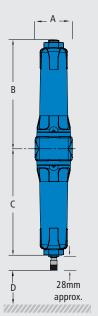


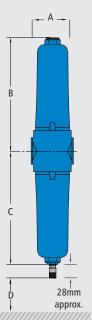


Technical Specification

Filter model	Pipe size inches	Inlet flow rate*		Dimensions mm				Weight	Element model	Element model	No. of
		Nm³/hr	SCFM	Α	В	С	D	Kg	Coalescing	Carbon	Elements
D3028XAC	1/4	42	25	70	204	199	70	1.0	E30408DXA	/ E30408DAC	1/1
D3038XAC	3/8	54	32	70	204	199	70	1.0	E30408DXA	/ E30408DAC	1/1
D3058XAC	1/2	85	50	70	204	199	70	1.1	E30412DXA	/ E30412DAC	1/1
D3059XAC	1/2	119	70	100	240	236	80	2.3	E30613DXA	/ E30613DAC	1/1
D3078XAC	3/4	144	85	100	240	236	80	2.3	E30613DXA	/ E30613DAC	1/1
D3079XAC	3/4	212	125	100	360	356	80	3.1	E30625DXA	/ E30625DAC	1/1
D3109XAC	1	297	175	100	360	356	80	3.2	E30625DXA	/ E30625DAC	1/1

^{*} Rated flow at 7 barg, reference conditions 1 bar (a) 20°C





D3028 to D3109

Grade	D	ΧA	DAC			
Particle removal	0.01	micron	0.01 micron			
Maximum particle size class**		1	1			
Maximum oil content**		1	1			
Maximum oil carryover at 20°C (68°F)	0.01	mg/m³	0.003 mg/m ³			
Pressure loss: clean and dry	85 mbar	1.2 psi	75 mbar	1.1 psi		
Pressure loss: saturated	125 mbar	1.8 psi	N/A	N/A		
Pressure loss: element change	12 months	12 months 8000 hours		at least every 6 months		
Maximum temperature	50°C	122°F	50°C ***	122°F ***		
Maximum working pressure	16 barg	232 psig	16 barg	232 psig		
Element end cap colour	Bla	ack	Black			

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

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 odour 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.
- 3. 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 (CO₃).
- 5. Alpha Filters are manufactured from cast aluminium alloy and are PED 2014/68/EU compliant for group 2 gases.
- Threaded connections are Rp (BSP Parallel) to ISO 7-1 or NPT to ANSI/ASME B1.20.1 if supplied within North America. Rc (BSP Taper) to ISO 7-1 also available.
- 7. For NPT threads, add the suffix N e.g. D3028NXAC, and for Rc threads add the suffix C e.g. D3028CXAC.
- B. Filters are suitable for use with mineral and synthetic oils plus oil-free compressed air applications.
- 9. Mounting brackets are available for all models see price guide.
- Filter elements should be changed every 12 months / 8000 hours (whichever comes first). Activated Carbon filter elements should be changed every 6 months.









