

ALUMINIUM RANGE FILTERS industrial applications

Progressive filtration grades to guarantee the solution to every application need from one reliable supplier

WATER SEPARATORS series WS

A spinner type diffusor is located in the filter housing in order to remove droplets of oil and water moisture by centrifugal action.

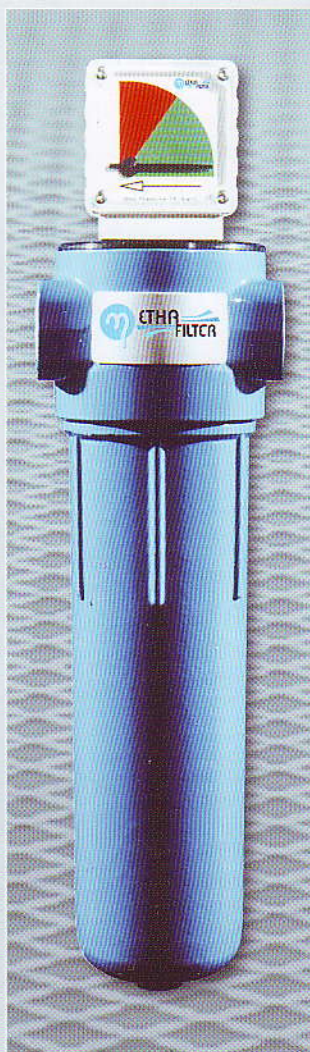
Installation is typically downstream of aftercoolers, air receivers, refrigerant dryers and at strategic points in pipe work layout.

PREFILTER ÷ SEPARATORS grade VF25

The 25 μ installed upstream of refrigerated dryers will keep heat exchangers clean for constant performance, while condensate drains will operate trouble free. The 25 μ coarse filtration is also indicated to protect high η coalescers.

PREFILTER grade FF5

Multipurpose 5 μ is very effective in removing bulk oil which contains burnt-by products such as laquers. The 5 μ coarse filtration is also indicated to protect high efficiency coalescers.



FINE FILTRATION grade MFO

0.6 μ filter for removing liquids, small particles and coalescing oil aerosols down to 0.1 mg/m³.

Typical application is downstream of refrigerated dryer for service air, or preceeding a superior grade SMA.

PRIME EFFICIENCY COALESCER grade SMA

Absolute D.O.P. individually tested 0.01 μ filter for removing sub-micron particles and extremely fine atomized oil mists down to 0.01 mg/m³ at the highest η of 99.9999 %. Preceed with MFO protection filter.

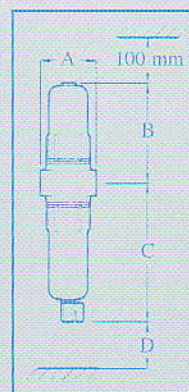
ACTIVATED CARBON grade CA

Residual 0.005 mg/m³ by absorption on activated dust free carbon charcoal for elimination of vapour, smell and odours currently associated to mineral and synthetic oils.

duplex - compact two stage filter - grade SMAC



duplex filter is the clever solution for compact combination of absolute removal of finest water and oil aerosols and vapour. The bottom stage, equipped with an internal automatic drain valve provides ultra high efficiency coalescer down to 0.01 mg/m³, while the top activated carbon stage absorbs vapour phase by reducing gaseous traces down to 0.005 ppm_v. *duplex* is an advantageous space saver conciliating ease of integration in compact apparatus, at great economy for the installer. The range is available for connections 1/4", 3/8" and 1/2". *duplex* contributes at most convenience in applications where pure clean air is needed, typically for instance as a component in breathing air, point of use filter for painting, small instrument air feed in food packaging, ...



OTHER SPECIALITIES

DUST FILTERS - grade RD

HIGH TEMPERATURE - grade TH

AMMONIA REFRIGERANT FILTERS - grade NHs

Please contact ETHAFILTER for other information

INNOVATIVE CLE

FILTER range - screwed connections

complete FILTER model	Ø ISO 7/1 "	CAPACITY (@ 7 bar)		replacement element type	n°	dimensions mm			
		Nm³/h	l/min			A	B	C	D
A 20 ...	1/4"	35	600	E 3611...	1	72	35	210	75
A 30 ...	3/8"	52	850	E 3711...	1	88	32	210	100
A 55 ...	1/2"	110	1800	E 5111...	1	88	32	250	100
A 76 ...	3/4"	216	3600	E 7111...	1	125	39	300	100
A 105 ...	1"	250	4150	E 8111...	1	125	39	450	150
A 106 ...	1"	300	5000	E 7311...	1	125	39	300	100
A 126 ...	1 1/4"	540	9000	E 8211...	1	125	39	450	150
A 153 ...	1 1/2"	725	12000	E 8311...	1	135	50	480	150
A 203 ...	2"	800	13300	E 8311...	1	135	50	680	150
A 205 ...	2"	1150	19200	E 8511...	1	200	68	740	200
A 250 ...	2 1/2"	1620	27000	E 12511...	1	200	68	590	200
A 305 ...	3"	1620	27000	E 12511...	1	200	68	860	200
A 306 ...	3"	2210	36800	E 12611...	1	200	68	590	200
A 308 ...	3"	2600	43300	E 12811...	1	230	65	985	300
... = add. grade		... = add. grade							

WS - SEPARATOR range

CAPACITY (@ 7 bar)		Ø ISO 7/1 "	WS SEPARATOR model
l/min	Nm³/h		
600	35	1/4"	A 20 WS
850	52	3/8"	A 30 WS
1830	108	1/2"	A 50 WS
3500	216	3/4"	A 75 WS
5000	300	1"	A 100 WS
9000	540	1 1/4"	A 125 WS
12000	725	1 1/2"	A 150 WS
19200	1150	2"	A 200 WS
28000	1700	2 1/2"	A 250 WS
42500	2550	3"	A 300 WS

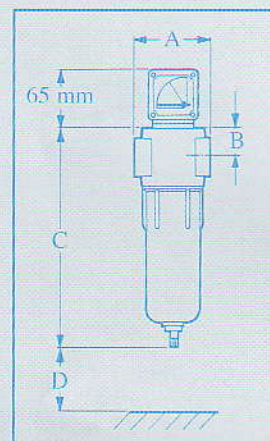
ALUMINIUM RANGE HOUSING DATA

design pressure	16 bar
design temperature	120 °C
internally "epc" coating	
externally baked epoxy powder painting	blue - RAL 5015

duplex

two stage grade SMAC combined filter

complete FILTER model	Ø ISO 7/1 "	CAPACITY (@ 7 bar)		replacement element type	n°	dimensions mm			
		Nm³/h	l/min			A	B	C	D
D 20 SMAC	1/4"	25	416	E 361 SMA + E 381 CA	1 + 1	72	150	173	75
D 30 SMAC	3/8"	50	830	E 371 SMA + E 381 CA	1 + 1	72	150	173	75
D 45 SMAC	1/2"	75	1250	E 51 SMA + E 01 CA	1 + 1	90	200	225	100



PERFORMANCE (@ ISO 8573.1)	separator WS	grade VF25	grade FF5	grade MFO	grade SMA	grade CA/SMAC
particle removal		25 μ	5 μ	1 μ	0.01 μ	0.01 μ
efficiency	98.5 % @ 3 μ	100 %	100 %	99.99 %	99.9999 %	99.9999 %
residual oil (@ 20 °C)	30 mg/m³	10 mg/m³	5 mg/m³	0.1 mg/m³	0.01 mg/m³	0.005 mg/m³
initial Δp ⇒ clean and dry	<i>not applicable</i>	30 mbar	40 mbar	75 mbar	100 mbar	75/150 mbar
initial Δp ⇒ wet (not for RD grade)	70 mbar	50 mbar	75 mbar	150 mbar	300 mbar	see note 3
max. Δp ⇒ change element	<i>not applicable</i>	400 mbar				see note 3
recommended feed temperature	≤ 70 °C	120 °C			≤ 50 °C	≤ 25 °C
flow direction (@ wet gas)	-	through the VF25, FF5 and coalescer grade MFO and SMA ⇒ from inside to outside				
flow direction (@ dry gas RD.../WS)	through the RD... grade particle filter element ⇒ from outside to inside					
dry particle filter ⇒		grade RD25	grade RD5	grade RD1	grade RDA	grade CA/SMAC

CORRECTION OF CAPACITY according to operating pressure

	Q decrease ↘								Q increase ↗							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
supply pressure bar (g)	25	40	50	65	75	90	100	110	125	140	150	160	175	190	200	210
capacity adjustment %																

NOTES

- "pop-up" indicator supplied as accessory on filters models A 20 and A 30; differential pressure indicator DPS on larger models A 55 to A 308. No Δp indicator is normally provided on WS separators as well as on activated carbon filters.
- coalescing type filter housings supplied normally with internal automatic drain valve, float type. Condensate drain offered as optional choice on WS separators. Manual vent cock supplied as standard on activated carbon filters.
- grade SMAC must not operate in oil saturated condition and need to be replaced periodically, at least every (6) months.
- grade CA does not remove gaseous contaminants such as for instance CO and CO₂. Please contact ETHAFILTER in case of specific need.