AMMONIA AND REFRIGERANT FILTERS

Walker Filtration research, design and manufacture in the UK a comprehensive range of ammonia and refrigerant filters for use in (models C25 to C201) with various flow rates up to 675 scfm (1150 Nm³/h) plus a range of higher capacity carbon steel flanged filter

where the quality and cleanliness of the gas needs to be maintained to the highest level.

specialist applications

These products are often installed within large industrial cooling systems and offer the system protection from the build up of excessive



products with flow rates from 1270 to 15000 scfm (2160 to 25500 Nm³/h). The filter elements incorporated within the screwed filter housings include the unique Walker designed 'push on' filter element which reduces maintenance time and allows the filter to be located

amounts of oil on heat exchanger surfaces, prevents the blockage of tubes, valves and expansion orifices and also maintains the overall cleanliness and capacity of the system.

Within our standard range we offer stainless steel filter housings with connection sizes of 1/4'' to 2''

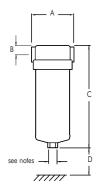
within the most confined places.

The flanged range of filters include features such as stainless steel distribution plate and side mounted threaded connections close to the bottom of the filter vessel to facilitate the mounting of accessory products as required.

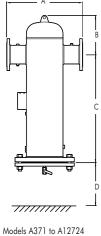


TECHNICAL DATA

AMMONIA AND REFRIGERANT FILTERS



Models C25 to C201



FILTER	PIPE	FLOW RATE		ELEMENT	NUMBER OF	D	IMENSI	ONS m	m	WEI	GHT	DIMENSIONS inch				FILTER	
MODEL	SIZE	Nm³/h	SCFM	MODEL	ELEMENTS	А	В	С	D	Kg	lb	A	В	С	D	MODEL	
C25 (grade)	1/4	35	20	E50 (grade) NH3	1	85	18	170	75	1.7	3.8	3 ¹ / ₂	3/4	7	3	C25 (grade)	
C37 (grade)	3/8	52	30	E51 (grade) NH3	1	85	18	205	100	2.0	4.4	3 ¹ / ₂	3/4	9	4	C37 (grade)	
C50 (grade)	1/2	108	63	E52 (grade) NH3	1	85	18	255	100	2.2	4.9	3 ¹ / ₂	3/4	10	4	C50 (grade)	
C75 (grade)	3/4	216	127	E715 (grade) NH3	1	110	27	270	150	4.0	8.8	4 1/2	1 1/4	11	6	C50 (grade)	
C101 (grade)	1	300	176	E730 (grade) NH3	1	110	27	420	300	5.0	11	4 1/2	1 1/4	17	12	C101 (grade)	
C150 (grade)	1 ¹ / ₂	725	427	E830 (grade) NH3	1	150	45	525	300	15	33	6	1 ³ / ₄	21	12	C150 (grade)	
C200 (grade)	2	800	470	E830 (grade) NH3	1	150	45	525	300	15	33	6	1 3/4	21	12	C200 (grade)	
C201 (grade)	2	1150	675	E86 (grade) NH3	1	150	45	825	500	21	46	6	1 3/4	33	20	C201 (grade)	
A371 (grade)	DN80	2160	1270	E139 (grade) NH3	1	450	940	300	700	58	128	17 ³ /4	12	37	28	A371 (grade)	
A473 (grade)	DN100	3100	1824	E88 (grade) NH3	3	520	960	300	700	74	163	20 1/2	12	38	28	A473 (grade)	
A474 (grade)	DN100	4250	2500	E88 (grade) NH3	4	520	960	300	700	74	163	20 1/2	12	38	28	A474 (grade)	
A676 (grade)	DN150	6500	3824	E88 (grade) NH3	6	680	1000	400	700	165	364	26 ³ / ₄	16	39	28	A676 (grade)	
A678 (grade)	DN150	8720	5130	E88 (grade) NH3	8	780	1030	400	700	208	459	30 3/4	16	41	28	A678 (grade)	
A8710 (grade)	DN200	11000	6470	E88 (grade) NH3	10	780	1060	440	700	260	573	30 ³ / ₄	18	42	28	A8710 (grade)	
A10716 (grade)	DN250	17000	10000	E88 (grade) NH3	16	900	1100	530	700	450	992	35 ¹ / ₂	21	44	28	A10716 (grade)	
A12724 (grade)	DN300	25500	15000	E88 (grade) NH3	24	900	1100	600	700	1200	2646	35 ¹ / ₂	24	44	28	A12724 (grade)	

SPECIFICATION	GRADE	XI NH3	GRADE XA NH3				
Particle removal	lm	icron	0.01 micron				
Maximum oil carryover at 20°C (68°F)	0.1 mg/m ³	0.1 ppm	0.01 mg/m ³	0.01 ppm			
Maximum recommended temperature	120°C	248°F	50°C	122°F			
Pressure loss - clean and dry	75 mbar	1.1 psi	100 mbar	1.5 psi			
Pressure loss - oil saturated	150 mbar	2.2 psi	300 mbar	4.4 psi			
Pressure loss - change element	400 mbar	6 psi	400 mbar	6 psi			
Maximum working pressure	16 barg	232 psig	16 barg	232 psig			
Element end cap material		zinc plated o	carbon steel				

NOTES

- 1. Threaded ammonia and refrigerant filters are manufactured from 316 grade stainless steel.
- 2. Threaded connections are Rc taper to ISO7/1 or NPT to ANSI B2.1 if supplied within North America.
- 3. Filter element end caps are carbon steel. Direction of air flow, inside to out through filter element.
- 4. Threaded ammonia and refrigerant filters are supplied with a drain plug, manual drain valves are available.
- 5. Threaded ammonia and refrigerant filters are not coated.
- 6. Mounting brackets are available for models C25 to C201.
- 7. Flanged ammonia and refrigerant filters are fabricated from carbon steel.
- 8. Flanged ammonia and refrigerant filters are designed and manufactured in accordance with PED 97/23/EC.
- 9. Flanged connections are to BS 4504 PN16, DIN2576.
- 10. Inlet and outlet pressure tappings are included to facilitate pressure gauge installation.
- 11. 1/2" manual drain valves are fitted to A371 (grade) to A8810 (grade), 3/4" fitted to A10716 (grade) and A12724 (grade) as standard. An additional 1/2" side entry drain port is included on models A371 (grade) to A8710 (grade), 3/4" to A10716 (grade) and A12724 (grade).
- 12. Flanged ammonia and refrigerant filters are coated externally with blue polyester powder paint finish to eliminate corrosion, internals are etched primed only.

CORRECTION FACTOR

For maximum flow rate, multiply model flow rate shown in the above table by the correction factor corresponding to the working pressure.

Operating Pressure	barg	0.3	0.6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	psi	4	9	14.5	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction Factor		0.21	0.29	0.38	0.53	0.65	0.76	0.84	0.92	1	1.07	1.13	1.19	1.25	1.31	1.36	1.41	1.46	1.51



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