

## Bauer Filter Processing Capacity Correction Factors:

Reduce the room & compressor temp to make filters last longer.

Compressor Room Temp. °F	Separator Inlet Temp °F	Correction Factor	Compressor Room Temp. °C	Separator Inlet Temp °C	Correction Factor
32	50 - 57	1.85	0	10 - 14	1.85
41	59 - 66	1.34	5	15 - 19	1.34
50	68 - 75	1.00	10	20 - 24	1.00
59	77 - 84	0.75	15	25 - 29	0.75
68	86 - 93	0.57	20	30 - 34	0.57
77	95 - 102	0.43	25	35 - 39	0.43
86	104 - 111	0.34	30	40 - 44	0.34
95	113 - 120	0.27	35	45 - 49	0.27
104	122 - 129	0.21	40	50 - 54	0.21

### Instructions for Use (for all ambient temperatures above or below 10 C)

1. Determine Bauer cartridge or filter system air processing capacity from Bauer distributor in cubic feet or cubic metres.
2. Using ambient temperature measured in the compressor room multiply the processing capacity by the appropriate temperature correction factor above.
3. Divide corrected filter processing capacity by compressor model's free air delivery (FAD). Divide this number by 60 to determine number of compressor hours on filter system at new ambient temperature.

### Example

Bauer cartridge 058827A 40,000 cubic feet processing capacity @ 10°C ambient (50°F)

Compressor room ambient temperature 35°C (95°F); The correction factor @ 95 °F is 0.27

New processing capacity:  $0.27 \times 40,000 = 10,800$  cubic feet; Compressor free air delivery: 14 cubic feet/min

Filter lifetime hours:  $10,800 \text{ cu. ft} / 14 = 771$  minutes = **12.9 hours** @ 35°C ambient (95 °F)

That is about 135 SCUBA flasks at 80 cu ft each.

### COMMENTS:

If you can keep your compressor and compressor room cooler the filters will last a lot longer.

If all else stays the same, but the compressor room temperature drops from 95°F to 86°F, you can charge 170 SCUBA flasks instead of 135 flasks. But if you drop the temperature to a balmy 77 °F, you can charge 215 flasks (80 more than at 95 °F)

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