



# G-C50F

## RIOT CONTROL FILTER CANISTER High Flow/Concave-Bevel Specialist Filter

The G-C50F Filter is a recent designed filter canister purposely manufactured for the removal of riot control agents and tear gases including CN, CS and OC Riot Control spray as well as biological and radiological particles.

The G-C50F filter has a unique concave-bevel shape providing a low profile close fit to any 40mm thread type respirator. A unique carbon cloth layer is used for the removal of any riot control agents, while it offers 25% increased high-flow features, 20% smaller in diameter and 20% lighter than any other filter on the market.



#### **APPLICATION**

The G-C50F is designed to remove particles of 0.3 micron diameter and is greater than 99.998%. Actual particulate penetration when using any aerosol which is <0.0031%.

#### COMPOSITE MANUFACTURE

The canister body is made of a modified polyphenylene ether polystyrene blend, which is a high quality engineering construction polymer. It provides a very robust product which is extremely durable against shock and impact in operational use. The canister body is black in colour.

The high efficiency particulate filter element is made of PTFE, PET/PE fibres. A double layer carbon cloth filter is used to remove any riot control agent that may pass through the particulate filter as vapour.

The CSCF50 Filter is entirely non-ferrous and non-magnetic. The **G-C50F Filter is 25% lighter**, weighing in 100g.



#### MARKET COMPARISON





The G-C50F is smaller in circumference and far more compact tha any other similiar product. Easy to store and carry for operational deployment.

Suits a wider range of tactical helmets and visor configurations than any other product too.



NOTE: The G-C50F Filter is not a CBRN or TICs/TIMs filter canister. The G-C50F Filter is manufactured and tested to ISO Standards.









### **ENVIRONMENT USE**

The G-C50F will maintain operating capability within the temperature ranges of -32°C to +49°C and humidity ranges 5% RH to 100% RH. The G-C50F has a **unique 16x chambers** design which increases the flow of intake, twice the air-flow compared to other filters which use a 8x chamber feature.

#### STORAGE & SHELF LIFE

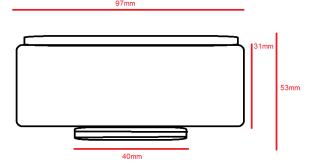
The predicted shelf life of the shrink-wrapped air controlled packaged filter canister is approx15 years. Expiration dates stated on the filter should be adhrered to when the product is is constant or regular use.

Filters should be kept in a dry and clean controlled environment, ideally within the temperature and humidity limits of 20°C +/- 10°C, <80% RH

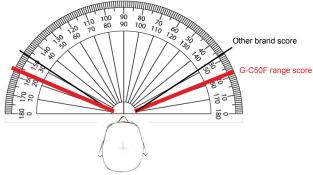
Once opened filters should be used immediately, and decontaminated and cleaned reguarly, as well the respirator to prolong life expectancy.

#### **SPECIFICATIONS**

Diagram to be used as a guide, this image is not to scale



### **PVT Score**



#### Score:

Using a PVT  $_{(Peripheral\ Vision\ Test)}$  control subjects wore a generic twin round-eye port respirator, with both the G-C50F filter and a leading competitors brand.

The test results indicated that the Mid/Near & Far peripherals were increased by almost 15% by using the G-C50F filter over the other brand. Using the G-C50F filter allows earlier detection of any threats or safety risks within the Mid and or Near peripherals. Unlike other brands which cause an obstruction of vision.

#### **PACKAGING**

The filter will be packaged in a machined shrink-wrapped and heat sealed bag. This sealing process last 5x times longer then normal wrapping and tape products. The filter is packed into boxes containing 4 filters.

Protection Matrix	
Asbestos	<b>✓</b>
Bacteria	<b>/</b>
Chloroacetophenone (CN)	<b>\</b>
Chlorobenzlidene	
Malononitrile (CS)	
Dust particles	<b>\</b>
Odour particles	
Oleoresin Capsicum (OC)	
Pepper Spray (PS)	<b>✓</b>
Radioactive particles	<b>✓</b>
Virus particles	



The G-C50F sits below the field of vision and does not impede or obstruct the users vision like other brands. This increases the the peripheral visions as indicated in the PVT Score analysis.