



**Breathing Air Systems Filtration Box, Four Outlet, 50 CFM, with  
Carbon Monoxide (CO) Monitor  
Bid Specifications**

Product Characteristics	
Description	The filtration box for the Breathing Air Distribution System (BRADS) permits up to four NIOSH-approved airline respirators to be connected to a single source of breathing air. The filtration box is equipped with three stage filtration and a continuous flow 115 Volt AC, 8-16VDC, Carbon Monoxide Monitor with two 9v DC internal batteries. The filtration box may be used in a portable or stationary position. Exterior clear gauge viewing window enables gauge monitoring while case is closed.
Component Parts	<p>The system consists of:</p> <ul style="list-style-type: none"> <li>• First Stage Particulate / Bulk Liquid Separation Filter Element. <ul style="list-style-type: none"> <li>• Filter Change indicator changes from green to red</li> <li>• Removes 95% bulk particulate and liquids @ 5 microns</li> <li>• Auto drain removes liquids from bowl and exits carrying case.</li> <li>• The automatic drains on the first and second stages are designed to remove bulk liquid contaminants. They will automatically drain after the level reaches 1/3 of the bowl capacity.</li> </ul> </li> <li>• Second Stage Oil Coalescing and Ultra Fine Particulates Filter Element. <ul style="list-style-type: none"> <li>• Filter Change indicator changes from green to red</li> <li>• Removes oil and particulate to 99.9998% at 0.01 micron</li> <li>• Auto drain removes liquids from bowl and exits carrying case.</li> <li>• The automatic drains on the first and second stages are designed to remove bulk liquid contaminants. They will automatically drain after the level reaches 1/3 of the bowl capacity.</li> </ul> </li> <li>• Third Stage Activated Charcoal Filter Element. <ul style="list-style-type: none"> <li>• Filter Change indicator changes from green to red</li> <li>• Removes organic vapors, odors, and tastes, less than 0.003pp/wt. remaining oil content.</li> <li>• Manual drain removes liquids from bowl.</li> </ul> </li> </ul>
Regulator	150 PSI inlet, 1/2 inch NPT, Adjustable 0-125 PSI Outlet, Self Relieving, Port for Gauge, Pressure regulator can be adjusted until the desired pressure for the respirator is reached with 0-12 psig limitations.
Pressure Gauge	Operates in 0-160 psig range
Manifold	Aluminum anodized, 1/2" NPT female inlet with 1/2" industrial interchange plug with cover, 1/4 NPT female port for gauge, four female outlet ports for 1/4 NPT connections.
Relief Valve	ASME certified set at 125 PSI, 1/8 In. NPT, manual pull ring, brass body.
Inlet	The inlet is 1/2" NPT with 1/2" industrial interchange quick-disconnect plug so the user can attach breathable air supply source. Inlet is sealed with disposable plug.
Outlet Fittings	There are four outlet fittings with union adapters, (male 3/4 inch -16 UNF going into a 1/4" NPT female manifold thread), to connect directly to NIOSH-approved breathing hose or quick-disconnects and hose. The union adapters can be removed and replaced with any suitable fitting with a 1/4" NPT male thread. The outlet manifold has four 1/4" NPT outlets. However, the union adapter is necessary to make connection to breathing hose.

Sockets	Units can be ordered with aluminum Snap-Tite quick-disconnect sockets, steel Foster quick-disconnect sockets, and brass Hansen quick-disconnect sockets. (See parts list).
CO Monitor	Mounted inside the Cover. Adjustable Flow Meter 0-500 cc/minute to control Sample flow to Monitor. The Carbon Monoxide Monitor continuously indicates the CO in the breathing air flowing to the respirators. The monitor operates on 115 VAC and has two 9 VDC batteries that provide a required bias voltage to the CO sensor and power the monitor in the event of an AC power failure.

Specifications	
Maximum Inlet Pressure	150 psi
Maximum Outlet Pressure	125 psi
Relief Value Pressure	125psi
Monitor Power	8-16 VDC or 110-120 VAC 50/60 Hz

Physical Characteristics	
Size	23.5 x 16.75 x 8.5 (inches)
Weight	26.4 pounds packaged
Case	Protective carrying case is constructed of durable corrosion resistant materials with pressure equalization valve so the case can be opened after exposure to a change of atmospheric conditions. Pelican case is green (Pantone 355C), poly blend plastic, pressure equalization valve, serial number label for unit warranty, with window to read pressure gauge labels identifying user items.
Packaging	Carton must be single wall C flute corrugated, with an ECT Valve of 32 or Greater with identifying part number on package.
Cushioning	"Sealed foam" as required to protect product.
Operation Label	Located inside the cover.
Serial Number Label	Located inside the cover.
Instruction Manual	Located inside the case. Manual instructions in English, French and Spanish.

**Breathing Air Systems Filtration Box, Four Outlet, 100 CFM, Carbon Monoxide (CO) Monitor Description (see diagram below)**

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|--|---|
| 1. Remote alarm jack   | 11. Dust covers   |
| 2. Jack cover  | 12. First stage filter assembly                             |
| 3. CO audible alarm  | 13. Second stage filter assembly                            |
| 4. Red high CO indicator   | 14. Third stage filter assembly                             |
| 5. Clear normal CO   | 15. CO flow sample  |
| 6. Normal operation indicator  | 16. Pressure regulator                                      |
| 7. Inlet, ½" NPT female inlet with ½" industrial interchange plug with cover | 17. CO monitor  |
| 8. Outlet pressure gauge   | 18. 115 VAC connection                                      |
| 9. 125 psi relief valve  | 19. Filter change indicators on all three filter assemblies |
| 10. Outlet connections   | 20. Exterior clear gage view window                         |

