



## Breathing Air Systems Filtration Box, Four Outlet, 100 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, 8-16 VDC, Carbon Monoxide Monitor with 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. 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. 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 0-125 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. 4-outlet manifold with 3/8" NPT to 1/4" NPT brass bushing.
Relief Valve	ASME Certified, 125 PSI, 1/8 In. NPT, Manual Pull Ring, Brass Body.
Inlet	The inlet is 1/2" NPT with 1/2" industrial interchanged quick-disconnect plug so the user can attach a breathable air supply source. Inlet is sealed with disposable plug.

Outlet Fittings	There are four outlet fittings. Units can be ordered with MSA Union Adapters, P/N 69542, (Male 3/4" -16 UNF going into a 1/4" NPT female manifold thread), to connect directly to MSA 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 4 outlet manifold has 1/4" NPT outlets. However, the union adapter is necessary to connect 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 psig
Maximum Outlet Pressure	125 psig
Relief Valve Pressure	125 psig
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
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. Case: Pelican, Green Color (Pantone 355C), Poly Blend Plastic, Pressure Equalization Valve, Serial Number Label for Unit Warranty, with Window to read Pressure Gage. Labels identifying User Items. Operation Label: Inside Cover - Serial No. Label: Inside Cover Exterior clear gauge viewing window enabling gauge monitoring while case is closed.
Packaging	Carton must be single wall C flute corrugated, with an ECT Value of 32 or Greater with identifying part number on package.
Cushioning	"Sealed foam" as required to protect product.
Instruction Manual	Located inside the case. Manual instructions are in English, French and Spanish.

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

1. Remote alarm jack
2. Jack cover
3. CO audible alarm
4. Red high CO indicator
5. Clear normal CO
6. Normal operation indicator
7. Inlet, ½" NPT female inlet with ½" industrial interchange plug with cover
8. Outlet pressure gauge
9. 125 psi relief valve
10. Outlet connections
11. Dust covers
12. First stage filter assembly
13. Second stage filter assembly
14. Third stage filter assembly
15. CO flow sample
16. Pressure regulator
17. CO monitor
18. 115 VAC connection
19. Filter change indicators on filters (not illustrated)
20. Clear gage view window on case (not illustrated)

