



Compact, RadialSeal™, Medium-Duty Air Cleaner

Designed for Horizontal Installation



Donaldson XRB air cleaners are built with Donaldson technologies.

The XRB air cleaner family is smaller in size compared to competitive models with similar airflow operating ranges.

XRB air cleaners effectively reduce contaminants flowing into the air intake system, provide a high level of engine protection from harmful contaminants and increase engine performance and fuel efficiency.

The XRB's plastic housing and durable construction enables installation in all types of operating environments and temperature ranges from -40 °F to 180 °F / -40 °C to 82 °C, operating in medium-dust conditions with engine airflow from 265 to 630 cfm.

The B080080 has non-metal primary and safety filters. The primary filters for the B100127 and B120420 have metal outer liners. The air cleaner models ship with both the primary and safety filters.

Like our FKB and PSD models, these air cleaners feature built-in mounting brackets. There's no need for additional mounting support.



Built-in mounting brackets on air cleaner body eliminate the need for mounting bands.



Cover latch position allows for minimum service clearance and eases filter service.



Air cleaners are equipped with the Donaldson Vacuator™ Valve.

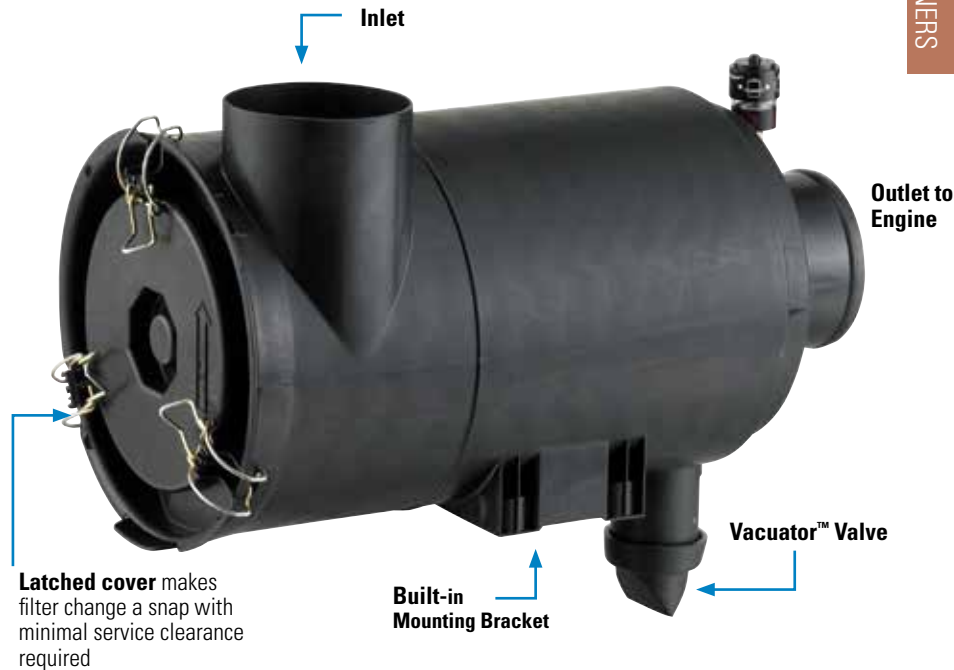
Built-in Mounting Brackets and Filter Indicator Port Easy to Service with Non-metal Filters

Applications

- On- and off-road equipment operating in medium-dust conditions with engine airflow range of 255 to 630 cfm (7.5 to 17.8 m³/min)
- Installs horizontally. Mounting the air cleaner directly to the engine is not recommended; excessive engine vibration can cause premature air cleaner structural failure.
- Sustained temperature tolerance: -40 °F to 180 °F / -40 °C to 82 °C. Do not install next to components that exceed the maximum temperature (180 °F / 82 °C) like a turbocharger, muffler, exhaust pipe or other high temperature component

Air Cleaner Features

- Smaller in diameter compared to competitive brands with similar airflow
- Improved handling and maintenance — lighter and smaller, changing filters is a snap
- Product design includes:
 - primary filter
 - safety filter
 - filter service indicator port
- Cover latch position allows for minimum service clearance and eases filter service
- Built-in mounting brackets on air cleaner body eliminate the need for mounting bands



Primary and safety filters for XR B housings.

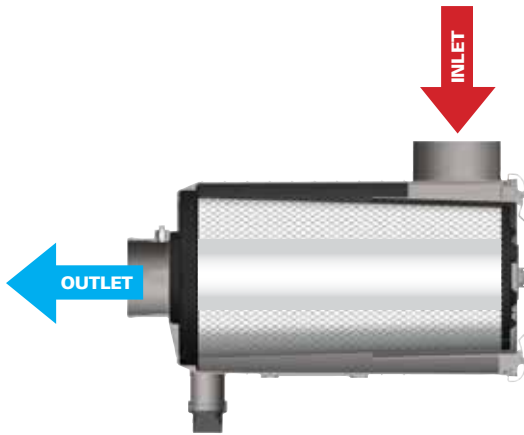
Installation Recommendations

- Air cleaner orientation is horizontal, with the drop tube pointing down — within +/- 15°. For service clearance, allow the entire length of the filter for removal and 1.38" (35mm) for service cover latches.
- Mounting is M8 x 1.25, with a maximum torque of 15 ft•lb.
- Connections: Inlet/Outlet maximum torque 40 in•lb.
- **Inlet accessory note:** The air cleaner housing can accommodate a plastic inlet hood or plastic TopSpin™ pre-cleaner, but not a metal pre-cleaner or accessory.
- Filter Service Indicator port arrives with plug/cap. Order filter service indicator separately. See accessories section. Indicator port maximum torque 1.5 ft•lb.



FLOW

Air in the Side, out the End (standard flow filters)



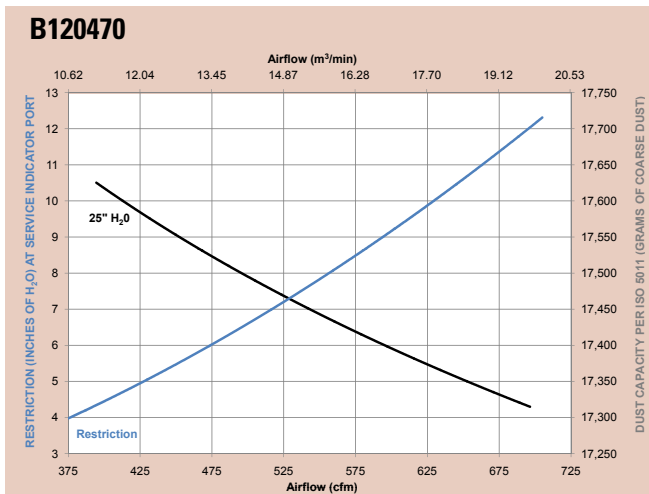
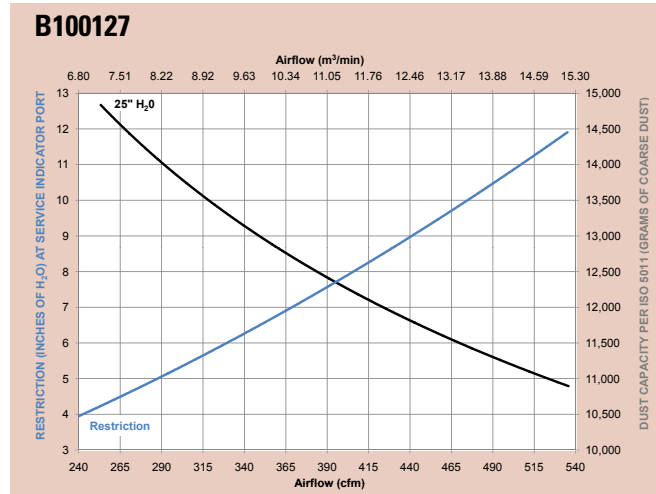
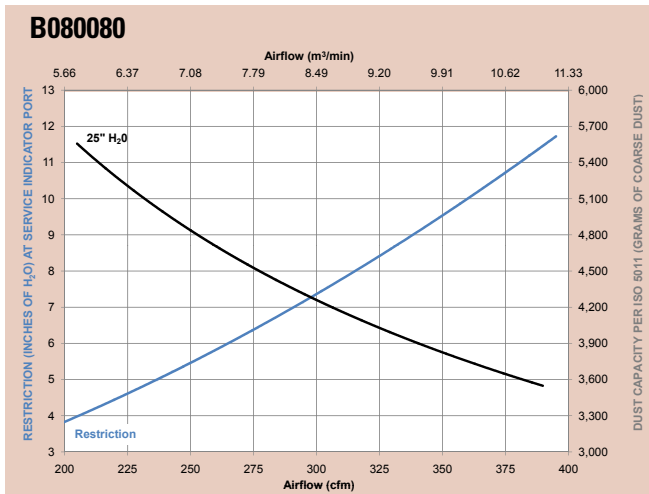
When Selecting an Air Cleaner . . .

Determine the airflow requirements of your engine, then find the corresponding cfm airflow in the table at right. The restriction numbers (shown in inches of water) indicate the approximate initial restriction of each model air cleaner at that cfm. If there are two air cleaner models that fit your parameters, choosing the one with the lower restriction will provide longer filter service life. When calculating total initial restriction of the entire air intake system, include the restriction caused by ducting, elbows, and pre-cleaners. See pages 271-272 for ducting restriction estimates.

Initial Airflow Restriction

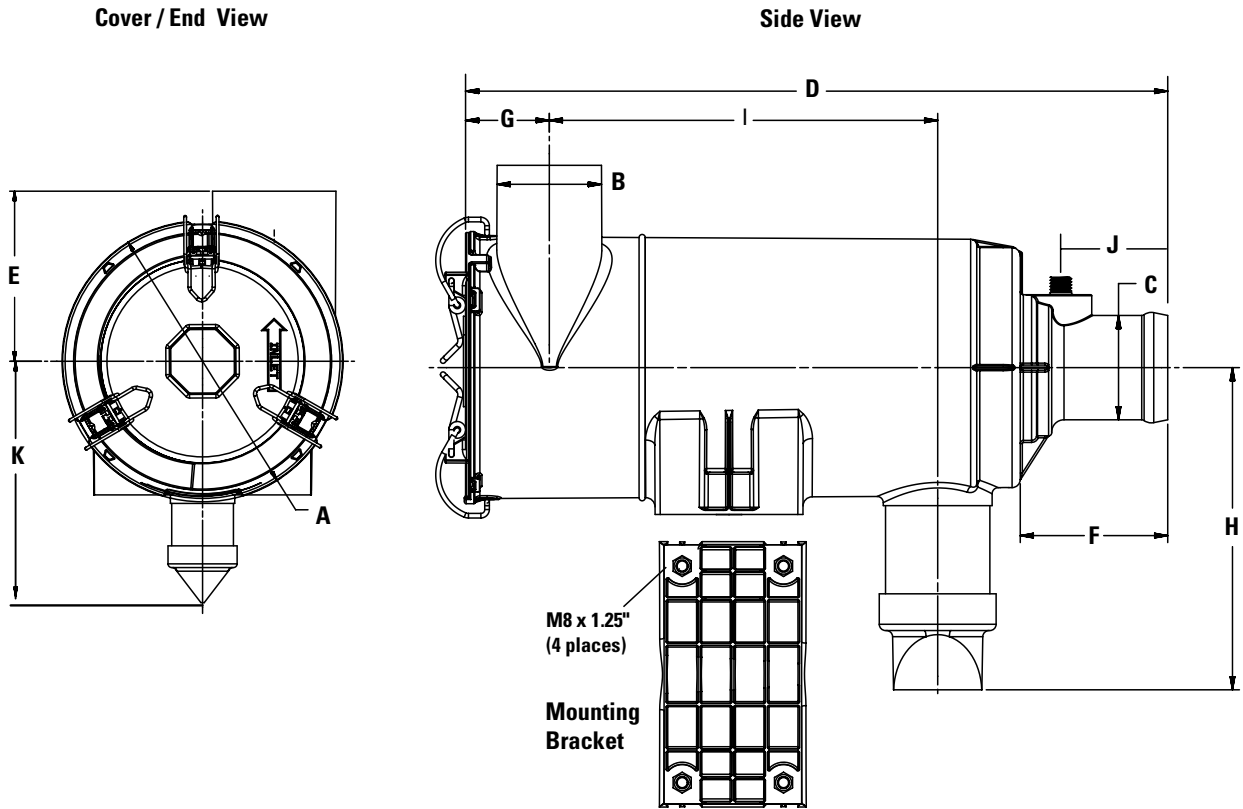
CFM @ H ₂ O			Air Cleaner Model
6"	8"	10"	
265	315	360	B080080
330	405	475	B100127
475	555	630	B120470

XR Air Cleaner Performance Curves (Restriction & Dust Capacity)*



*Results generated using laboratory testing pursuant to ISO5011. Actual performance during use may vary depending on multiple factors, including specific product configuration, external conditions and application.

XRB Specification Illustration

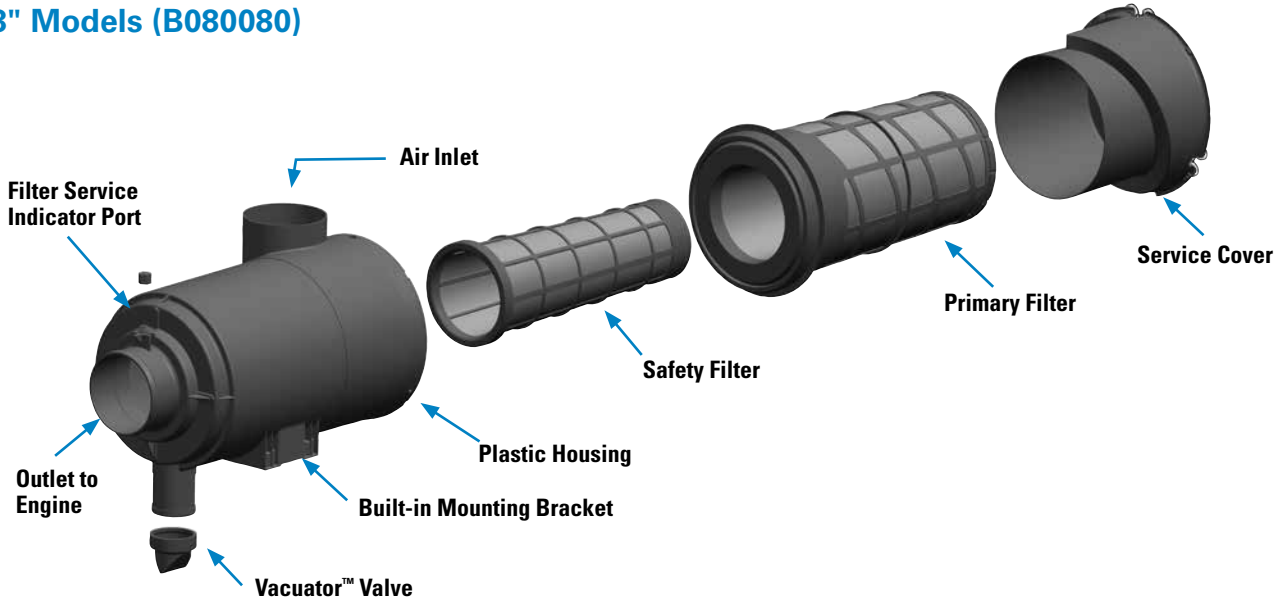


XRB Specifications

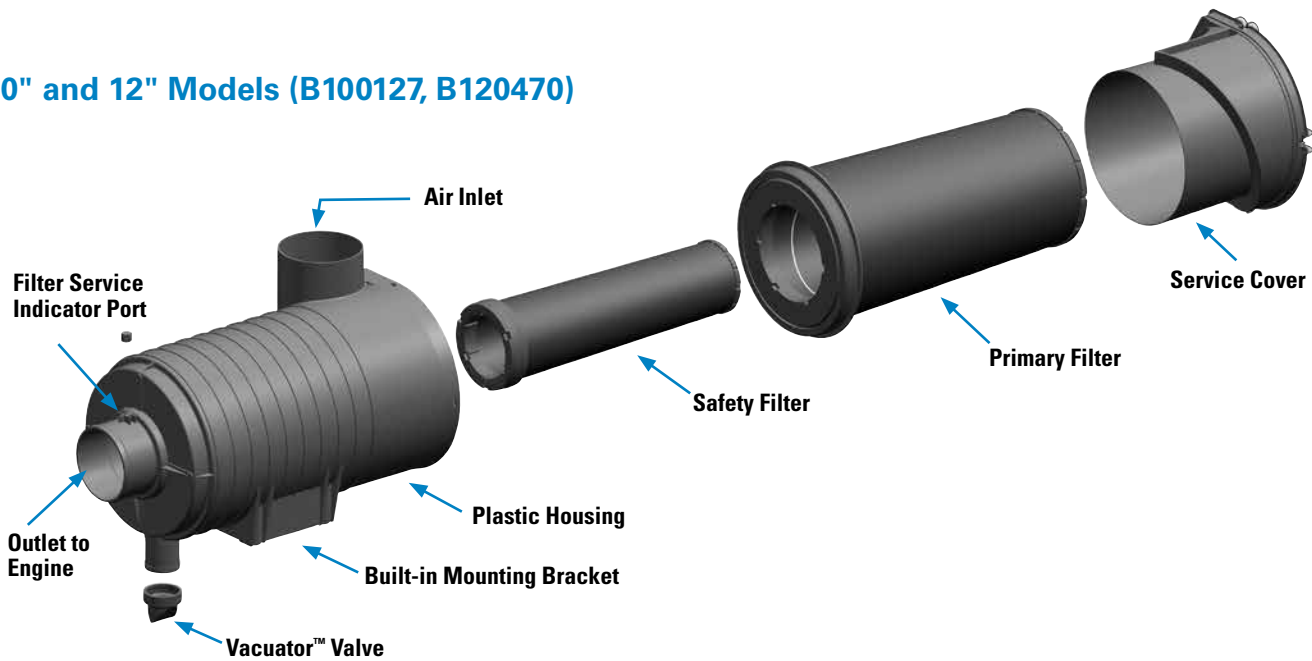
Air Cleaner Models	Body Dia. (A)	Inlet Dia. (B)	Outlet Dia. (C)	Housing Length (D)	Inlet Height (E)	Outlet Length (F)	Inlet Location (G)	Center Line to Valve (H)	Service Clear. (I)	Weight	Restr. Tap Loc. (J)	Mounting Bracket Height (K)
B080080	9.11" 231.3mm	4.00" 102mm	4.00" 102mm	16.75" 425mm	5.50" 140mm	2.40" 61mm	3.14" 80mm	7.78" 198mm	14.76" 375mm	5.52lb 2.5kg	1.57" 40mm	4.33" 110mm
B100127	11.31" 287mm	5.00" 127mm	4.50" 114mm	22.25" 565mm	7.80" 198mm	2.82" 72mm	3.47" 88mm	8.85" 225mm	19.41" 493mm	13.00lb 5.95kg	1.97" 50mm	5.71" 145mm
B120470	13.00" 330mm	6.00" 152mm	5.00" 128mm	23.68" 601mm	8.58" 218mm	2.81" 71mm	3.95" 100mm	9.63" 245mm	20.71" 526mm	20.00lb 9.07kg	1.97" 50mm	6.50" 165mm



8" Models (B080080)



10" and 12" Models (B100127, B120470)



Service Parts & Accessories

B080080	XRB	
Cover	P605731	
Elbow, 45°	P105545	
Elbow, 90°	P105533	
Elbow, 90° reducing	P121482	
Filter, primary (non metal)	P611190.....3	
Filter, safety	P611189.....3	
Hump hose	P105609	
Informer™ indicator 25" H ₂ O	X002277	
Inlet hood, plastic	H000467	
Outlet band clamp	P148343	
Vacuator™ Valve	P158914	

B100127	XRB	
Cover	P609942	
Elbow, 45°	P114316	
Elbow, 90°	P113733	
Filter, primary (metal liner)	P611539.....3	
Filter, safety	P611540.....3	
Hump hose	P114317	
Informer™ indicator 25" H ₂ O	X002277	
Inlet hood, metal	H000165	
Inlet hood, plastic	H000469	
Outlet band clamp	P148344	
Vacuator™ Valve	P158914	

B120470	XRB	
Cover	P608117	
Elbow, 45°	P109021	
Elbow, 90°	P107844	
Elbow, 90° reducing	P143895	
Filter, primary (metal liner)	P608116.....3	
Filter, safety	P608391.....3	
Hump hose	P105610	
Informer™ indicator 25" H ₂ O	X002277	
Inlet hood, metal	H000275	
Inlet hood, plastic	H000606	
Outlet band clamp	P148345	
Vacuator™ Valve	P158914	

NOTES:
3 = Shipped with air cleaner initially

This servicing information is provided as a best practices guide. It is not intended to replace or supersede the service instructions supplied by your engine or vehicle manufacturer.

1 Check the Restriction

Replace the filter only when the restriction level has reached the maximum recommended by the engine or equipment manufacturer or on a regular service schedule.



2 Clean out the Vacuator™ Valve

Remove the Vacuator Valve and clean out any dust found in the drop tube. Reinstall Vacuator Valve or replace if it is worn or damaged.



3 Remove Service Cover

Unlatch and remove the service cover on the air cleaner to access the filters.



4 Remove the Primary Filter

The primary filter makes such a tight seal, that you will encounter some initial resistance, similar to breaking the seal on a jar. To break the seal, grab the end of the filter and gently move the filter from side-to-side and pull it out of the housing.

Application Note: Avoid dislodging contaminant from the filter when it is removed from the air cleaner housing.



Continued on next page



5 Remove the Safety Filter

Replace the safety filter with every third primary filter change unless excessive dust has settled on it during servicing. If you are reusing the safety filter keep it clean while servicing the housing to avoid contamination.

Remove the safety filter by pulling it straight out — giving you easy access to properly clean the primary filter's seal surface.

Block the outlet tube of the air cleaner, using a small dampened towel, prior to cleaning the seal surface to avoid contaminating the induction system.



If a safety filter is not present, check to see it has attached itself to the inside of the primary filter during removal. Inspect the seal surface and housing for any damage. Replace the complete air cleaner if damage is present.

6 Clean the Inside Surface

With a second clean damp cloth, thoroughly clean the inside of the housing and seal surface.



Failure to clean the surface may cause contaminants to be introduced to the outlet tube or onto the seal area of the primary filter during reinstallation, resulting in a dirty air leaks.

7 Inspect the Primary and Safety Filters

Inspect new filters for any damage, voids, cuts, tears or indentations in the media or urethane sealing surface. If the filter is damaged, do not install.



8 Install the Safety Filter

Remove the dampened towel from the outlet tube that was used to protect the induction system during servicing.

Install the safety filter by pressing it firmly in place until seated. When properly fitted it should fit snugly inside the outlet tube.



9 Install the Primary Filter

Install the new primary filter by gently sliding it over the safety filter and pressing it into place until fully seated. When installing, apply pressure by hand at the outer rim of the filter, not in the center, to complete a tight seal. Continue pushing the filter into the outlet tube until it stops. The critical sealing area will compress slightly, adjust itself, and distribute the sealing pressure evenly.



If you perform filter maintenance service on a schedule versus using service indicators, you may want to write the service date on the filter end cap.

10 Fasten the Service Cover

Replace the service cover, with the "INLET" arrow lined up with the air cleaner inlet. Do not force the cover onto the air cleaner or use the service cover to push the filter into place.

Refasten latches to secure the cover and make sure that the latches penetrate the slots in both the body and the cover.



If the cover does not fit flush to the body, the primary filter is not properly seated in the housing. Recheck the primary and safety filter installation, following the proper installation procedure so they become fully seated. The cover will then go on easily. Using the cover to push the filters could cause damage to the housing and will void the warranty.

11 Inspect the Air Cleaner System

Inspect and torque all clamps, bolts and connections in the entire air intake system. Check for holes in piping and repair if needed.

Reset the filter service indicator if applicable.

