

Automotive & Powersports

THE FACTS ABOUT YOUR INTAKE & AIR FILTER

ISO 5011 Tested to Make Sure You Maximize Airflow While Still Protecting Your Engine.

Part Number:

Test Date:

Description:

Test Report #:

Vehicle Applications:

TECHNICAL BULLETIN

There is a lot of misinformation in the marketplace. S&B publishes specific test results for each of our intakes & filters as shown below, so you can make an informed decision. Remember, improving your airflow is only good if your engine is still protected. That's the S&B difference!

FACT: S&B Flows

Better than Stock.

In tests performed in our climate controlled laboratory according to the ISO5011 Test Standard, S&B's intake kit (and filter) had significantly lower restriction (better airflow) than the stock intake system. See the graph on the next page.

WATCH OUT: Some competitors overstate airflow.

If they state that their filter will flow, let's say 1000 cfm, without stating at what restriction level, they are trying to mislead you.

Description	% S&B Flowed Better than	Test Conditions
	Stock (tested @cfm)	Barometric Pressure
S&B Intake w/ Oiled Filter (Secondary Inlet - Open)		Airflow Setpoint
S&B Intake w/ Oiled Filter		Relative Humidity
(Secondary Inlet - Closed)		Temperature
S&B Intake w/ Dry Filter		Type of Dust
Secondary Inlet - Open		Batch #
S&B Intake w/ Dry Filter		Dust Feed Rate
(Secondary Inlet - Closed)		(grams/minute)

FACT: S&B Protects Your Engine

S&B Tests at the highest rated CFM for your vehicle when determining the efficienty rate (amount of dust the filter stops), so that we can be sure that your engine will be protected

Description	Efficiency Rate (Tested @cfn
Stock	
S&B Intake w/ Cleanable Filter	
S&B Intake w/ Dry Filter	

_cfm)

WATCH OUT: Some Competitors Use the Same Efficiency Rates for Multiple Part Numbers

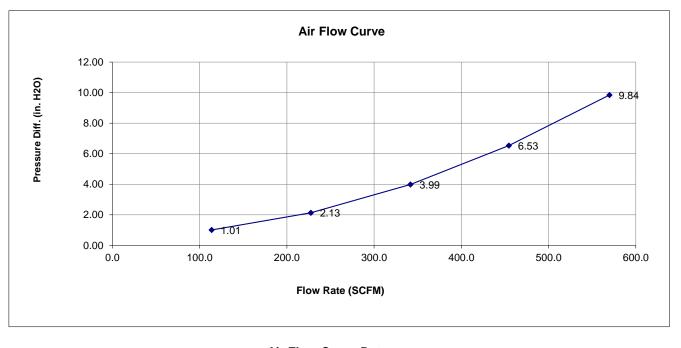
Many send one filter off to a lab to be tested at a low cfm and then publish this efficiency rate for all of their part numbers

Test #: 780 Sample #: 1 Filter #: A3248C Housing #: STOCK Date Code: 43809 BEN L 12/11/2019 GENERAL MOTORS AC DELCO



Test Description: STOCK AIR INTAKE RESTRICTION

Test Conditions			
Barometric Pressure: Air Flow Type: Number of Pleats: Flow Direction:	SCFM	Relative Humidity: Temperature: Pleat Depth:	37 % 73 deg. F in.



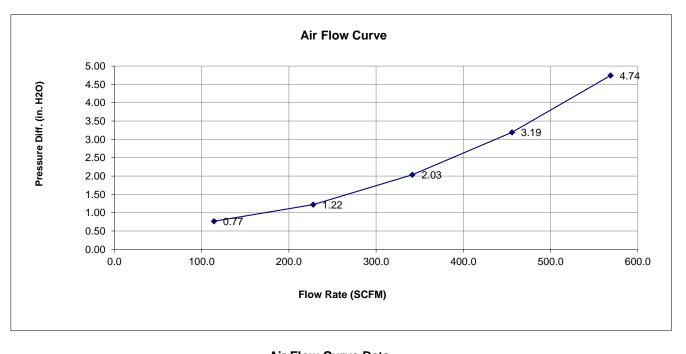
Air Flow Curve Data		
Flow Rate	Differential Pressure	
114	1.01	
227	2.13	
342	3.99	
455	6.53	
570	9.84	

Test #: 810 Sample #: 6 Filter #: KF-1076 Housing #: 75-5136 Date Code: 44085 BL 9/11/2020 S&B FILTERS S&B FILTERS



Test Description: PRODUCTION KIT, OILED FILTER, 170G OIL, BOX PLUG NOT INSTALLED

	Test Conditions			
Barometric Pressure: Air Flow Type:	0	Relative Humidity: Temperature:	43 %	
Number of Pleats:		Pleat Depth:	67 deg. F 1 in.	
Flow Direction:				



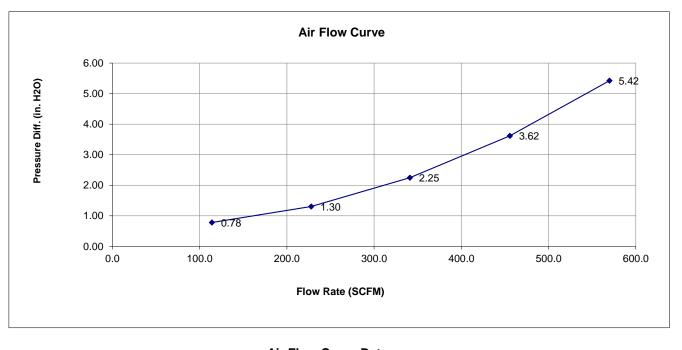
Air Flow Curve Data		
Flow Rate	Differential Pressure	
114	0.77	
228	1.22	
342	2.03	
456	3.19	
569	4.74	

Test #: 810 Sample #: 5 Filter #: KF-1076 Housing #: 75-5136 Date Code: 44085 BL 9/11/2020 S&B FILTERS S&B FILTERS



Test Description: PRODUCTION KIT, OILED FILTER, 170G OIL, BOX PLUG INSTALLED

Test Conditions				
Barometric Pressure:	28.89454 in. Hg	Relative Humidity:	46 %	
Air Flow Type:	SCFM	Temperature:	68 deg. F	
Number of Pleats: Flow Direction:	120	Pleat Depth:	1 in.	



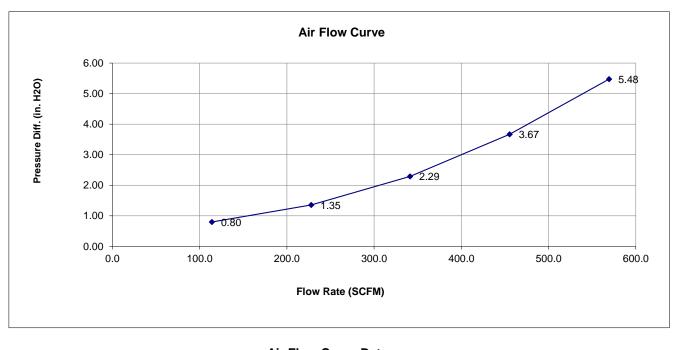
Air Flow Curve Data		
Flow Rate	Differential Pressure	
114	0.78	
228	1.30	
341	2.25	
456	3.62	
570	5.42	

Test #: 810 Sample #: 7 Filter #: KF-1076D Housing #: 75-5136D Date Code: 44085 BL 9/11/2020 S&B FILTERS S&B FILTERS



Test Description: PRODUCTION KIT, OILED FILTER, 20G OIL, BOX PLUG INSTALLED

Test Conditions			
Barometric Pressure:	28.89858 in. Hg	Relative Humidity:	39 %
Air Flow Type:	SCFM	Temperature:	69 deg. F
Number of Pleats: Flow Direction:	160	Pleat Depth:	1 in.



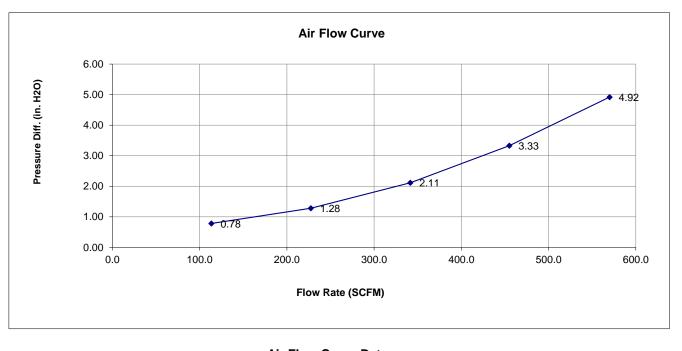
Air Flow Curve Data		
Flow Rate	Differential Pressure	
114	0.80	
228	1.35	
341	2.29	
455	3.67	
569	5.48	

Test #: 810 Sample #: 8 Filter #: KF-1076D Housing #: 75-5136D Date Code: 44085 BL 9/11/2020 S&B FILTERS S&B FILTERS



Test Description: PRODUCTION KIT, OILED FILTER, 20G OIL, BOX PLUG NOT INSTALLED

Test Conditions				
Barometric Pressure:	28.89468 in. Hg	Relative Humidity:	41 %	
Air Flow Type:	SCFM	Temperature:	69 deg. F	
Number of Pleats: Flow Direction:	160	Pleat Depth:	1 in.	



Air Flow Curve Data		
Flow Rate	Differential Pressure	
113	0.78	
227	1.28	
341	2.11	
455	3.33	
570	4.92	

Air Filter Full Life Efficiency Test Report

Test #: 781 Sample #: 2 Filter #: Housing #: Date Code: 43809 Operator: KM Report Date: 12/11/2019 Filter Mfg.: Housing Mfg.:

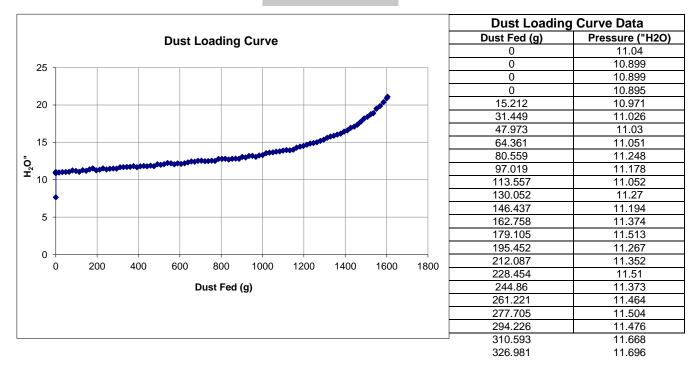


Test Description: CUMMINS STOCK INTAKE, OEM FILTER 53034051AB, 580 CFM

		Test	Condition	s		
Barometric Pressure:					Humidity:	31 %
Air Flow Setpoint:	580 SCFM	Type of Dust:				
Test Procedure: Air Flow Type:	SCFM			Tor	Batch #: nperature:	74 deg. F
Test Endpoint:	10 in. H2O				Add Rate:	NaN g/min
Number of Pleats:			Α	ccumulative		16.42 g/min
Flow Direction:				PI	eat Depth:	in.
		Te	st Results			
Initial Delta P	1.91 in. H2O	Accumulative Capacity:				494.20 g
			Test Time:			98.21 min
		Initial	Accumulative			
			Blanket		Blanket	
	Start			3218.80		
	End			3713.00		
	Gain			494.20	6.28	
	Efficiency			98.75%		

Standard Restriction

Pressure Differential



Air Filter Full Life Efficiency Test Report

Test #: 810 Sample #: 5 Filter #: KF-1076 Housing #: 75-5136 Date Code: 44085 Operator: BL Report Date: 9/11/2020 Filter Mfg.: S&B FILTERS Housing Mfg.: S&B FILTERS



Test Description: PRODUCTION KIT, OIILED FILTER, 170G OIL, BOX PLUG NOT INSTALLED

		Tes	t Condition	S			
Barometric Pressure:	28.904 in. Hg			Relative	Humidity:	42	%
Air Flow Setpoint:	0 SCFM			Ту	be of Dust:	A4 COARSE	
Test Procedure:	FICIENCY				Batch #:	14057C	
Air Flow Type:	SCFM			Ter	nperature:	67	deg. F
Test Endpoint:	10 in. H2O			Initial	Add Rate:	NaN	g/min
Number of Pleats:	120		Δ	ccumulative	Add Rate:	0	g/min
Flow Direction:				PI	leat Depth:	1	in.
Initial Delta P	4.78 in. H2O		est Results	Accumulative	e Capacity:	494.70	g
					Test Time:	38.34	•
		Initial	tial Accumulative				
			Blanket		Blanket		
	Start			5833.40	603.83		
	End			6328.10	608.58		
	Gain			494.70	4.75		
	Efficiency			99.05%			

Standard Restriction

Pressure Differential

Dust Loading Curve 16 14 12 10 H₂0" 8 6 4 2 0 0 100 200 300 400 500 600 70 Dust Fed (g)

	Dust Loading Curve Data					
	Dust Fed (g)	Pressure ("H2O)				
	0	4.902				
1	15.566	4.857				
	31.558	4.85				
-	47.878	4.942				
	64.088	5.008				
	80.061	4.899				
	96.142	5.022				
1	112.502	5.056				
	128.675	5.085				
	144.736	5.193				
-	160.854	5.141				
	176.978	5.172				
-	193.222	5.275				
	209.119	5.218				
	224.931	5.401				
	241.375	5.456				
00	257.757	5.484				
00	273.86	5.566				
	289.883	5.604				
	305.47	5.598				
	321.476	5.501				
	336.334	5.572				
	352.085	5.605				
	368.65	5.643				

Air Filter Full Life Efficiency Test Report

Test #: 810 Sample #: 6 Filter #: KF-1076D Housing #: 75-5136D Date Code: 44085 Operator: BL Report Date: 9/11/2020 Filter Mfg.: S&B FILTERS Housing Mfg.: S&B FILTERS

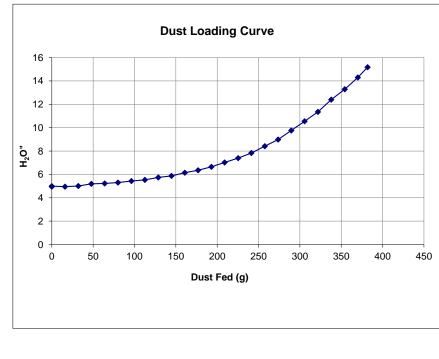


Test Description: PRODUCTION KIT, OIILED FILTER, 20G OIL, BOX PLUG NOT INSTALLED

		Tes	t Condition	าร		
Barometric Pressure:	28.886 in. Hg			Relative	Humidity:	39 %
Air Flow Setpoint:	0 SCFM			Тур	be of Dust:	A4 COARSE
Test Procedure:	FICIENCY				Batch #:	14057C
Air Flow Type:	SCFM			Ter	nperature:	70 deg. F
Test Endpoint:	10 in. H2O			Initial	Add Rate:	NaN g/min
Number of Pleats:	160		A	Accumulative	Add Rate:	0 g/min
Flow Direction:				PI	eat Depth:	1 in.
		T	est Results			
Initial Delta P				Accumulative	373.60 g	
				Test Time:	23.73 min	
		Initial	Initial Accumulative			
			Blanket		Blanket	
	Start			5570.90		
	End			5944.50	611.15	
	Gain			373.60	2.80	
	Efficiency	99.26%				

Standard Restriction

C Pressure Differential



Dust Loading Curve Data					
Dust Fed (g)	Pressure ("H2O)				
0	4.996				
15.865	4.946				
31.964	5.005				
47.773	5.188				
63.881	5.226				
80.077	5.305				
96.34	5.428				
112.486	5.53				
128.724	5.739				
144.774	5.874				
160.854	6.143				
176.928	6.353				
193.082	6.643				
209.005	7.017				
225.307	7.395				
241.331	7.83				
257.616	8.412				
273.631	8.987				
289.626	9.761				
305.706	10.549				
321.749	11.347				
337.941	12.403				
354.265	13.288				
370.131	14.291				



