

Automotive & Powersports

# THE FACTS ABOUT YOUR INTAKE & AIR FILTER

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

Test Date:	
Test Report #:	

## 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.	WATCH OUT: Some competitors overstate airflow.

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. 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/ Cleanable Filter (Secondary Inlet - Open)		Airflow Setpoint
S&B Intake w/ Cleanable Filter		Relative Humidity
(Secondary Inlet - Closed)		Temperature
S&B Intake w/ Dry Filter	1// 15/1/	Type of Dust
(Secondary Inlet - Open		Batch #
S&B Intake w/ Dry Filter (Secondary Inlet - Closed)		Dust Feed Rate (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 @cfm)
Stock	
S&B Intake w/ Cleanable Filter	
S&B Intake w/ Dry Filter	

# **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

RESET FORM /

# **Air Filter Restriction Test Report**

Test #: 820 Sample #: 1 Filter #: KF-1050 Housing #: 75-5131 Date Code: 04.19.2021 WD 4/20/2021 S&B FILTERS S&B FILTERS



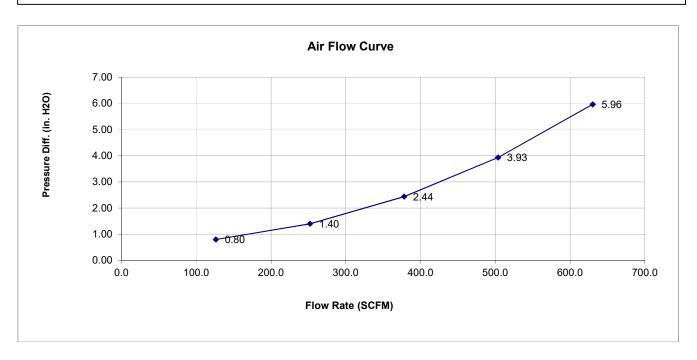
Test Description: 75-5131 WITH KF-1050 AND SECONDARY INLET OPEN

#### **Test Conditions**

Barometric Pressure: 28.89564 in. Hg
Air Flow Type: SCFM
Number of Pleats: Pleat Depth:

Flow Direction:

Plative Humidity: 30 %
Temperature: 67 deg. F
Pleat Depth: in.



#### **Air Flow Curve Data**

Flow Rate	<u>Differential Pressure</u>
126	0.80
252	1.40
378	2.44
504	3.93
630	5.96

## **Air Filter Capacity & Efficiency Test Report**

Test #: 820 Sample #: 2 Filter #: KF-1050 Housing #: 75-5131 Date Code: 04.19.2021 WD 4/20/2021 **S&B FILTERS S&B FILTERS** 



Test Description: 75-5131 WITH KF-1050 AND SECONDARY INLET CLOSED

#### **Test Conditions**

**Barometric Pressure:** 28.809 in. Hg Air Flow Setpoint: 631 SCFM Test Procedure: ISO-5011 Air Flow Type: SCFM Test Endpoint: 10 in. H2O

Number of Pleats: Flow Direction: Relative Humidity: 61 % Type of Dust: A4 COARSE Batch #: 14057C 69 deg. F Temperature:

Initial Add Rate: NaN g/min Accumulative Add Rate: 17.87 g/min

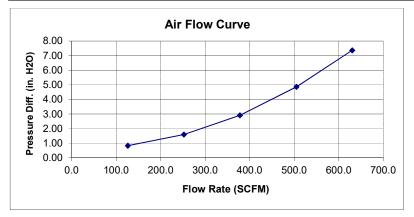
Pleat Depth: in.

#### **Test Results**

Initial Delta P 7.57 in. H2O **Accumulative Capacity:** 262.40 g

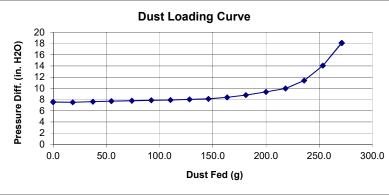
**Test Time:** 15.02 min

	Initial	Accun	nulative		
	Blanket		Blanket		
Start		4788.30	574.58		
End		5050.70	576.57		
Gain		262.40	1.99		
Efficiency	·	99.	24%	•	



#### **Air Flow Curve Data**

Flow Rate	<b>Differential Pressure</b>
126	0.83
252	1.60
378	2.92
505	4.86
630	7.36



#### **Dust Curve Selection**

- Standard Restriction
- Pressure Differential

# **Air Filter Restriction Test Report**

Test #: 820 Sample #: 3 Filter #: KF-1050D Housing #: 75-5131 Date Code: 04.19.2021 WD 4/20/2021 S&B FILTERS S&B FILTERS

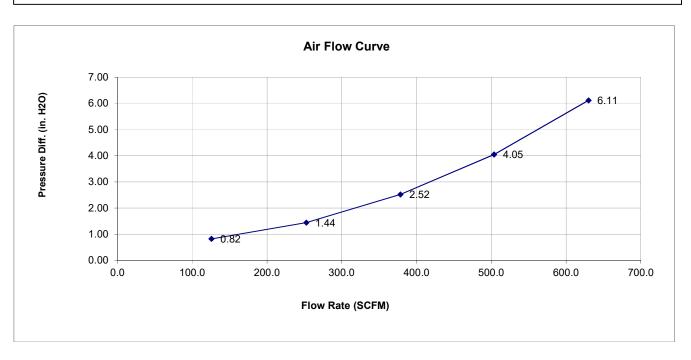


Test Description: 75-5131 WITH KF-1050D AND SECONDARY INLET OPEN

#### **Test Conditions**

Barometric Pressure:28.89289 in. HgRelative Humidity:57 %Air Flow Type:SCFMTemperature:67 deg. FNumber of Pleats:Pleat Depth:in.

Flow Direction:



#### **Air Flow Curve Data**

Flow Rate	<u>Differential Pressure</u>
126	0.82
252	1.44
378	2.52
504	4.05
630	6.11

# **Air Filter Capacity & Efficiency Test Report**

Test #: 820 Sample #: 4 Filter #: KF-1050D Housing #: 75-5131 Date Code: 04.19.2021 WD 4/20/2021 **S&B FILTERS S&B FILTERS** 



Test Description: 75-5131 WITH KF-1050D AND SECONDARY INLET CLOSED

#### **Test Conditions**

**Barometric Pressure:** 28.735 in. Hg Air Flow Setpoint: 631 SCFM Test Procedure: ISO-5011 Air Flow Type: SCFM Test Endpoint: 10 in. H2O

Number of Pleats:

Flow Direction:

Relative Humidity: 58 % Type of Dust: A4 COARSE Batch #: 14057C

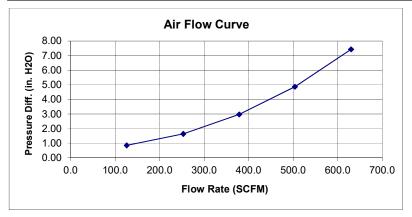
70 deg. F Temperature: Initial Add Rate: NaN g/min Accumulative Add Rate: 17.87 g/min Pleat Depth: in.

#### **Test Results**

Initial Delta P 7.54 in. H2O **Accumulative Capacity:** 196.20 g **Test Time:** 

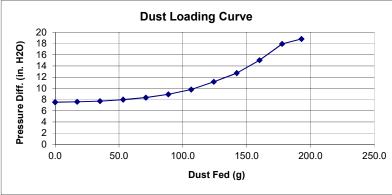
10.07 min

	Initial	Accumulative	
	Blanket	Blanket	
Start		4710.00 587.29	
End		4906.20 588.83	
Gain		196.20 1.54	
Efficiency		99.22%	



#### **Air Flow Curve Data**

Flow Rate	<u>Differential Pressure</u>
126	0.86
253	1.65
379	2.97
504	4.87
630	7.43



#### **Dust Curve Selection**

- Standard Restriction
- Pressure Differential

# **Air Filter Capacity & Efficiency Test Report**

Test #: 820
Sample #: 5
Filter #: FA-1617
Housing #: OEM
Date Code: 04.19.2021

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Test Description: 7.3L OBS STOCK INTAKE

#### Test Conditions

**Barometric Pressure:** 28.855 in. Hg Relative Humidity: 61 % Type of Dust: A4 COARSE Air Flow Setpoint: 631 SCFM Test Procedure: ISO-5011 Batch #: 14057C 69 deg. F Air Flow Type: **SCFM** Temperature: Test Endpoint: 10 in. H2O Initial Add Rate: NaN g/min Number of Pleats:

 Imber of Pleats:
 Accumulative Add Rate:
 17.87 g/min

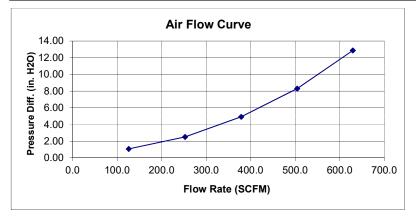
 Flow Direction:
 Pleat Depth:
 in.

# Test Results

Initial Delta P 12.96 in. H2O Accumulative Capacity: 127.80 g

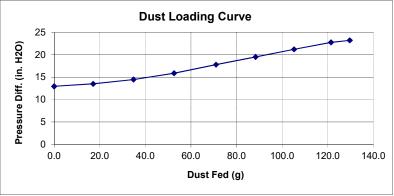
Test Time: 7.39 min

	Initial	Accur	nulative		
	Blan	ket	Blanket		
Start		4151.70	588.91		
End		4279.50	593.46		
Gain		127.80	4.55		
Efficiency		96.	44%		



#### **Air Flow Curve Data**

Flow Rate	<u>Differential Pressure</u>
126	1.08
253	2.51
379	4.92
505	8.30
630	12.87



#### **Dust Curve Selection**

- Standard Restriction
- Pressure Differential