

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!

<b>FACT:</b> S&B Flows	Better than Stock.	<b>WATCH OUT:</b> Some con

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/ 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	1/425	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

Test #: 918-3R Sample #: 3R Filter #: KF-1079 Housing #: 75-5187 Date Code: 45208 EM 10/9/2023 S&B S&B

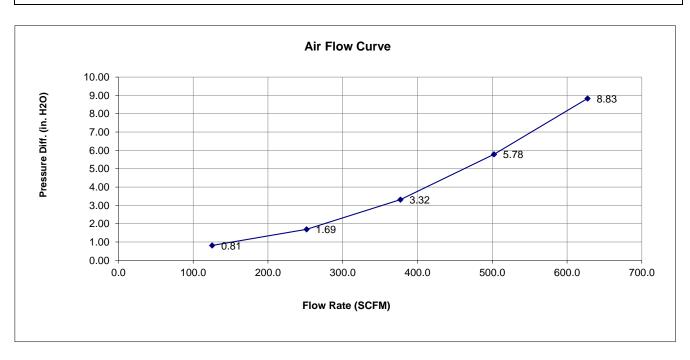


Test Description: 75-5187 NO BOX PLUG KF-1079 RESTRICTION TEST

#### **Test Conditions**

Barometric Pressure: 28.75463 in. Hg
Air Flow Type: SCFM
Number of Pleats: Relative Humidity: 41 %
Temperature: 71 deg. F
Pleat Depth: in.

Flow Direction:



<u>Differential Pressure</u>
0.81
1.69
3.32
5.78
8.83

Test #: 918-4R Sample #: 4R Filter #: KF-1079 Housing #: 75-5187 Date Code: 45208 EM 10/9/2023 S&B S&B

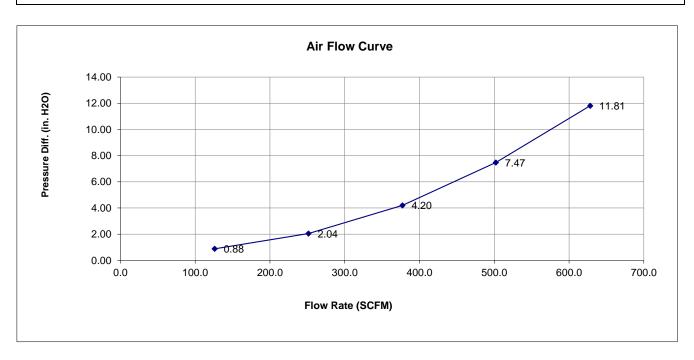


Test Description: 75-5187 WITH BOX PLUG, KF-1079 RESTRICTION TEST

#### **Test Conditions**

**Barometric Pressure:** 28.75431 in. Hg **Air Flow Type:** SCFM

Number of Pleats: Flow Direction: Relative Humidity: 41 %
Temperature: 70 deg. F
Pleat Depth: in.



Flow Rate	<u>Differential Pressure</u>
126	0.88
252	2.04
377	4.20
502	7.47
628	11.81

## Air Filter Full Life Efficiency Test Report

Test #: 918-5CE Sample #: 5CE Filter #: KF-1079 Housing #: 75-5187 Date Code: 45208

Operator: EM Report Date: 10/9/2023 Filter Mfg.: S&B Housing Mfg.: S&B



41 %

Test Description: 75-5187 WITH BOX PLUG KF-1079 CE TEST

Test Conditions

**Barometric Pressure:** 28.755 in. Hg 630 SCFM Air Flow Setpoint: **Test Procedure:** CE SCFM Air Flow Type:

**Test Endpoint:** 10 in. H2O

**Number of Pleats:** Flow Direction:

Type of Dust: A4 COARSE Batch #: 14996C Temperature:

**Relative Humidity:** 

72 deg. F **Initial Add Rate:** NaN g/min **Accumulative Add Rate:** 17.84 g/min

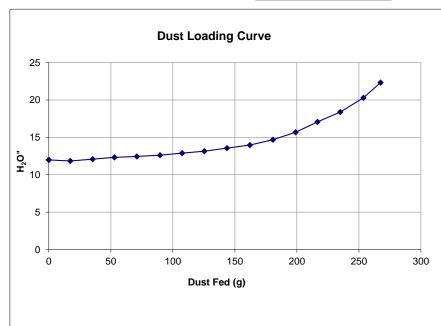
Pleat Depth: in.

Test Results

Initial Delta P 11.78 in. H2O **Accumulative Capacity:** 268.60 g **Test Time:** 14.82 min

	Initial	Accumulative	Accumulative	
		Kit	Blanket	
Start		6419.60	592.62	
End		6688.20	594.41	
Gain		268.60	1.79	
Efficiency		99 34%		

Standard Restriction Pressure Differential



Dust Loading Curve Data		
Dust Fed (g)	Pressure ("H2O)	
0	11.975	
17.322	11.836	
35.417	12.088	
52.948	12.32	
70.949	12.448	
89.702	12.606	
107.493	12.879	
125.4	13.138	
143.642	13.562	
162.146	13.965	
180.677	14.679	
198.91	15.681	
216.637	17.07	
234.978	18.378	
253.591	20.288	
267.42	22.32	

Test #: 918-6R Sample #: 6R Filter #: KF-1079D Housing #: 75-5187 Date Code: 45208 EM 10/9/2023 S&B S&B



42 %

72 deg. F

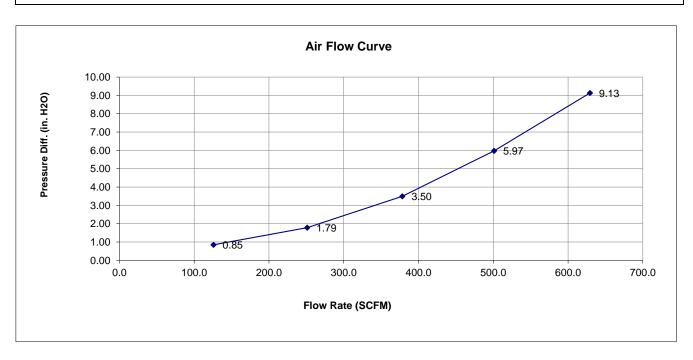
in.

Test Description: 75-5187 NO BOX PLUG KF-1079D RESTRICTION TEST

#### **Test Conditions**

Barometric Pressure: 28.75121 in. Hg
Air Flow Type: SCFM
Number of Pleats: Relative Humidity:
Temperature:
Pleat Depth:

Flow Direction:



Flow Rate	<u>Differential Pressure</u>
126	0.85
251	1.79
378	3.50
501	5.97
629	9.13

Test #: 918-7R Sample #: 7R Filter #: KF-1079D Housing #: 75-5187 Date Code: 45208

ΕM 10/9/2023 S&B S&B



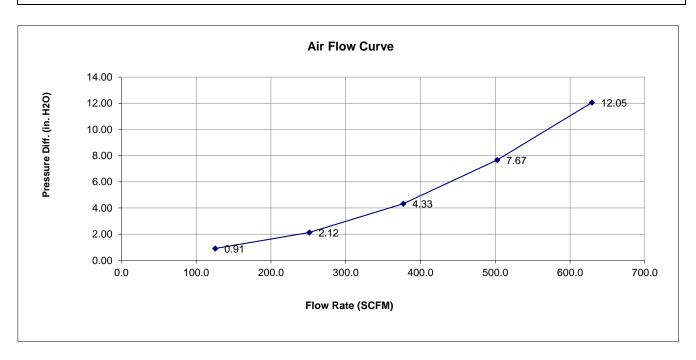
Test Description: 75-5187 WITH BOX PLUG KF-1079D RESTRICTION TEST

#### **Test Conditions**

Barometric Pressure: 28.73084 in. Hg Air Flow Type: SCFM Number of Pleats:

Flow Direction:

**Relative Humidity:** 42 % Temperature: 73 deg. F Pleat Depth: in.



Flow Rate	<u>Differential Pressure</u>
125	0.91
251	2.12
377	4.33
503	7.67
629	12.05

## Air Filter Full Life Efficiency Test Report

Test #: 918-8R Sample #: 8R Filter #: KF-1079D Housing #: 75-5187 Date Code: 45208

Operator: EM Report Date: 10/9/2023 Filter Mfg.: S&S Housing Mfg.: S&B



Test Description: 75-5187 WITH BOX PLUG KF-1079D CE TEST

**Test Conditions** 

**Barometric Pressure:** 28.729 in. Hg 630 SCFM Air Flow Setpoint: **Test Procedure:** SCFM Air Flow Type:

Flow Direction:

**Test Endpoint:** 10 in. H2O

**Number of Pleats:** 

**Relative Humidity:** 56 % Type of Dust: A4 COARSE Batch #: 14996C Temperature:

70 deg. F **Initial Add Rate:** NaN g/min **Accumulative Add Rate:** 17.84 g/min

in.

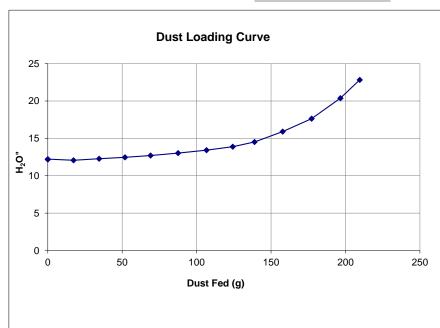
Pleat Depth:

Test Results

Initial Delta P 11.96 in. H2O **Accumulative Capacity:** 216.60 g **Test Time:** 11.75 min

	Initial Accu		Accumulative	cumulative	
			Kit	Blanket	
Start			6404.10	581.70	
End			6620.70	582.96	
Gain			216.60	1.26	
Efficiency			99.42%		

Standard Restriction Pressure Differential



Dust Loading Curve Data		
Dust Fed (g)	Pressure ("H2O)	
0	12.218	
17.315	12.066	
34.482	12.263	
51.869	12.467	
69.074	12.696	
87.512	13.018	
106.628	13.426	
124.218	13.882	
138.915	14.517	
157.792	15.898	
177.201	17.637	
196.54	20.366	
209.553	22.821	
	•	



 Test #: 918 1R
 EM

 Sample #: 1R
 10/9/2023

 Filter #: FA-1950
 FORD

 Housing #: 2021 FORD F250/350.6.2L
 FORD



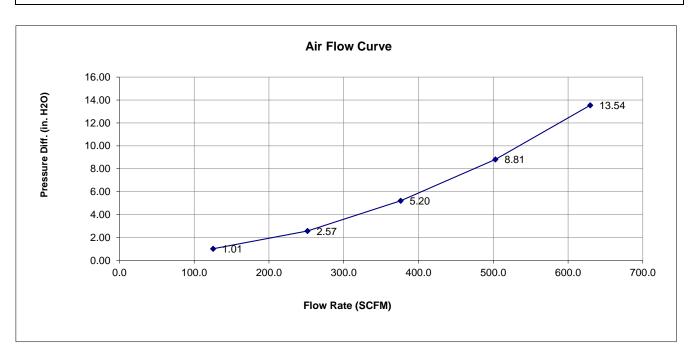
**Date Code: 45169** 

Test Description: 2021 FORD F250/350.6.2L INTAKE RESTRICION TEST

#### **Test Conditions**

Barometric Pressure: 28.69994 in. Hg Relative Humidity: 51 %
Air Flow Type: SCFM Temperature: 71 deg. F
Number of Pleats: Pleat Depth: in.

Flow Direction:



Flow Rate	<u>Differential Pressure</u>
125	1.01
252	2.57
376	5.20
503	8.81
630	13.54

## Air Filter Full Life Efficiency Test Report

Test #: 918 2CE Sample #: 2CE Filter #: FA 1950

Housing #: 2021 FORD F250/350. 6.2L

**Date Code: 45169** 

Test Description: 2021 FORD F250/350. 6.2L CE TEST

Operator: EM Report Date: 10/9/2023 Filter Mfg.: FORD Housing Mfg.: FORD



**Test Conditions** 

**Barometric Pressure:** 28.691 in. Hg **Relative Humidity:** 51 %

Type of Dust: 630 SCFM Air Flow Setpoint: **Test Procedure:** CE Batch #:

Air Flow Type: SCFM Temperature: 71 deg. F **Test Endpoint:** 10 in. H2O **Initial Add Rate:** NaN g/min **Number of Pleats: Accumulative Add Rate:** 17.84 g/min Flow Direction: Pleat Depth: in.

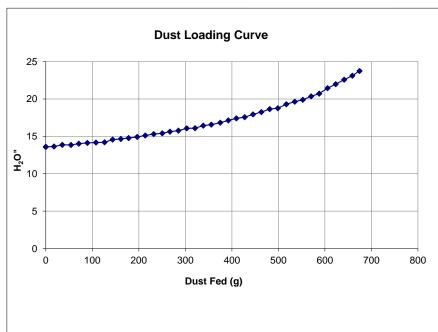
Test Results

Initial Delta P 13.36 in. H2O **Accumulative Capacity:** 681.20 g

**Test Time:** 37.85 min

	Initial	Accumulative	)
		Kit	Blanket
Start		4815.70	580.80
End		5496.90	581.85
Gain		681.20	1.05
Efficiency		99.85%	

Standard Restriction Pressure Differential



Dust Loading Curve Data		
Dust Fed (g)	Pressure ("H2O)	
0	13.593	
17.481	13.644	
35.467	13.861	
54.263	13.844	
71.105	14.02	
89.5	14.124	
107.849	14.178	
126.21	14.208	
143.515	14.563	
161.379	14.653	
177.987	14.772	
196.444	14.918	
213.922	15.119	
232.05	15.309	
250.426	15.408	
267.012	15.634	
285.07	15.763	
303.006	16.072	
320.787	16.087	
338.493	16.439	
355.776	16.563	
375.086	16.823	
392.297	17.135	
409.594	17.412	