



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!

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

<p>FACT: S&B Protects Your Engine S&B Tests at the highest rated CFM for your vehicle when determining the efficiency rate (amount of dust the filter stops), so that we can be sure that your engine will be protected</p>	<table border="1"> <thead> <tr> <th>Description</th> <th>Efficiency Rate (Tested @ _____ cfm)</th> </tr> </thead> <tbody> <tr> <td>Stock</td> <td></td> </tr> <tr> <td>S&B Intake w/ Cleanable Filter</td> <td></td> </tr> <tr> <td>S&B Intake w/ Dry Filter</td> <td></td> </tr> </tbody> </table>	Description	Efficiency Rate (Tested @ _____ cfm)	Stock		S&B Intake w/ Cleanable Filter		S&B Intake w/ Dry Filter		<p>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</p>
Description	Efficiency Rate (Tested @ _____ cfm)									
Stock										
S&B Intake w/ Cleanable Filter										
S&B Intake w/ Dry Filter										



Air Filter Restriction Test Report

Test #: 899
Sample #: 20R
Filter #:
Housing #:
Date Code: 45062

JJ
5/17/2023



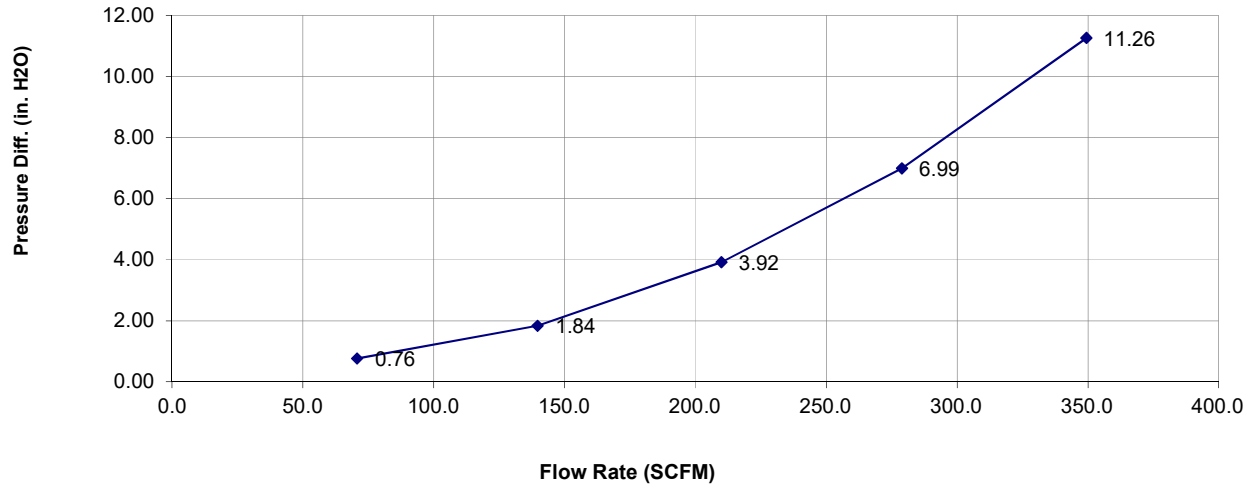
Test Description: 75-5163 2022+ TOYOTA TUNDRA PRODUCTION RESTRICTION KF-1090, DRIVER SIDE, OIL 85 pleat count,100g, C

Test Conditions

Barometric Pressure: 28.74044 in. Hg
Air Flow Type: SCFM
Number of Pleats:
Flow Direction:

Relative Humidity: 53 %
Temperature: 69 deg. F
Pleat Depth: in.

Air Flow Curve



Air Flow Curve Data

<u>Flow Rate</u>	<u>Differential Pressure</u>
71	0.76
140	1.84
210	3.92
279	6.99
349	11.26

Air Filter Restriction Test Report

Test #: 899
Sample #: 21R
Filter #:
Housing #:
Date Code: 45047

JJ
5/17/2023



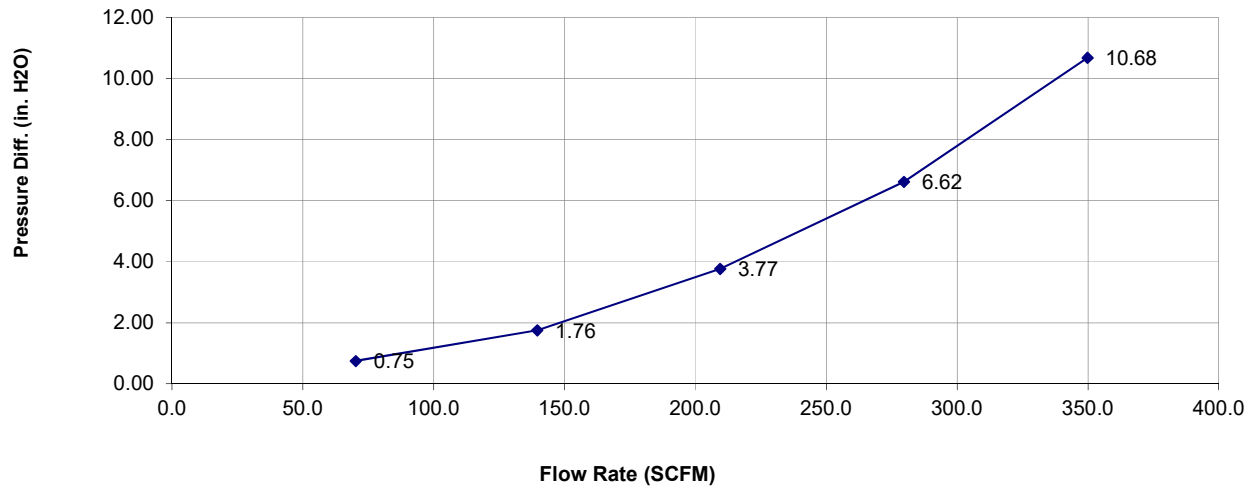
Test Description: 75-5163 2022+ TOYOTA TUNDRA PRODUCTION RESTRICTION KF-1090, DRIVER SIDE, OIL 85 pleat count, 100g, O

Test Conditions

Barometric Pressure: 28.74441 in. Hg
Air Flow Type: SCFM
Number of Pleats:
Flow Direction:

Relative Humidity: 56 %
Temperature: 69 deg. F
Pleat Depth: in.

Air Flow Curve



Air Flow Curve Data

<u>Flow Rate</u>	<u>Differential Pressure</u>
70	0.75
140	1.76
209	3.77
280	6.62
350	10.68

Air Filter Restriction Test Report

Test #: 899
Sample #: 22R
Filter #:
Housing #:
Date Code: 45047

JJ
5/17/2023



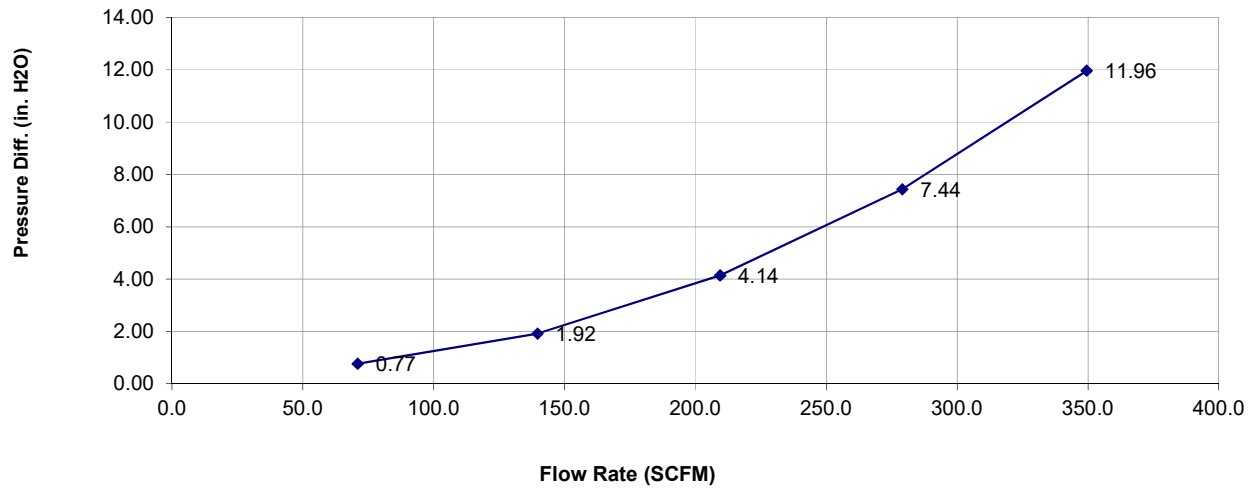
Test Description: 75-5163 2022+ TOYOTA TUNDRA PRODUCTION RESTRICTION KF-1090, PASSANGER SIDE, OIL 85 pleat count,10

Test Conditions

Barometric Pressure: 28.74377 in. Hg
Air Flow Type: SCFM
Number of Pleats:
Flow Direction:

Relative Humidity: 55 %
Temperature: 69 deg. F
Pleat Depth: in.

Air Flow Curve



Air Flow Curve Data

<u>Flow Rate</u>	<u>Differential Pressure</u>
71	0.77
140	1.92
209	4.14
279	7.44
350	11.96

Air Filter Restriction Test Report

Test #: 899
Sample #: 23R
Filter #:
Housing #:
Date Code: 45047

JJ
5/17/2023



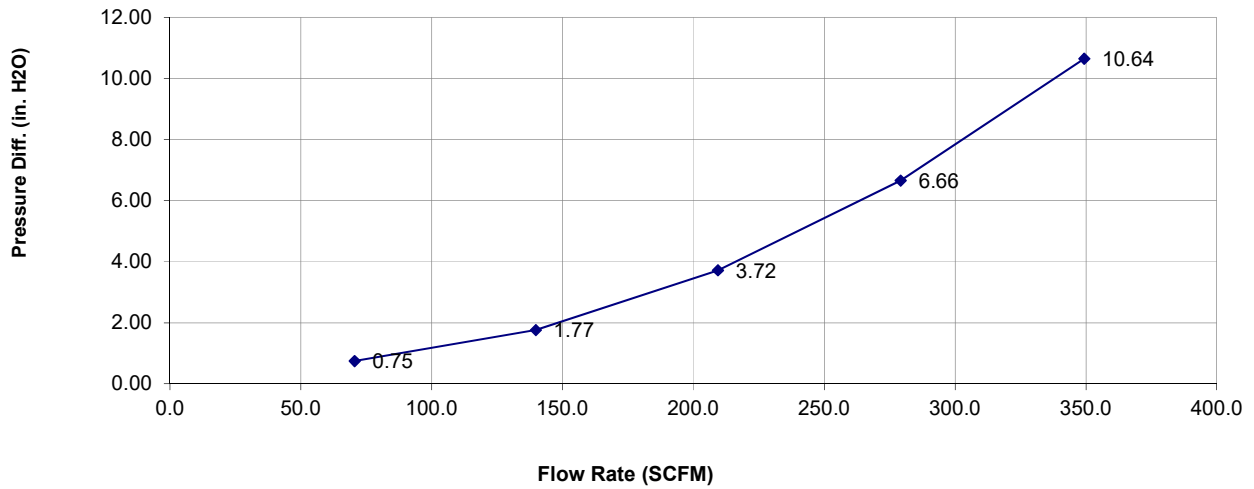
Test Description: 75-5163 2022+ TOYOTA TUNDRA PRODUCTION RESTRICTION KF-1090, PASSANGER SIDE, OIL 85 pleat count,10

Test Conditions

Barometric Pressure: 28.7414 in. Hg
Air Flow Type: SCFM
Number of Pleats:
Flow Direction:

Relative Humidity: 55 %
Temperature: 69 deg. F
Pleat Depth: in.

Air Flow Curve



Air Flow Curve Data

<u>Flow Rate</u>	<u>Differential Pressure</u>
71	0.75
140	1.77
209	3.72
279	6.66
349	10.64

Air Filter Full Life Efficiency Test Report

Test #: 899
Sample #: 24CE
Filter #:
Housing #:
Date Code: 45047

Operator: JJ
Report Date: 5/17/2023
Filter Mfg.:
Housing Mfg.:

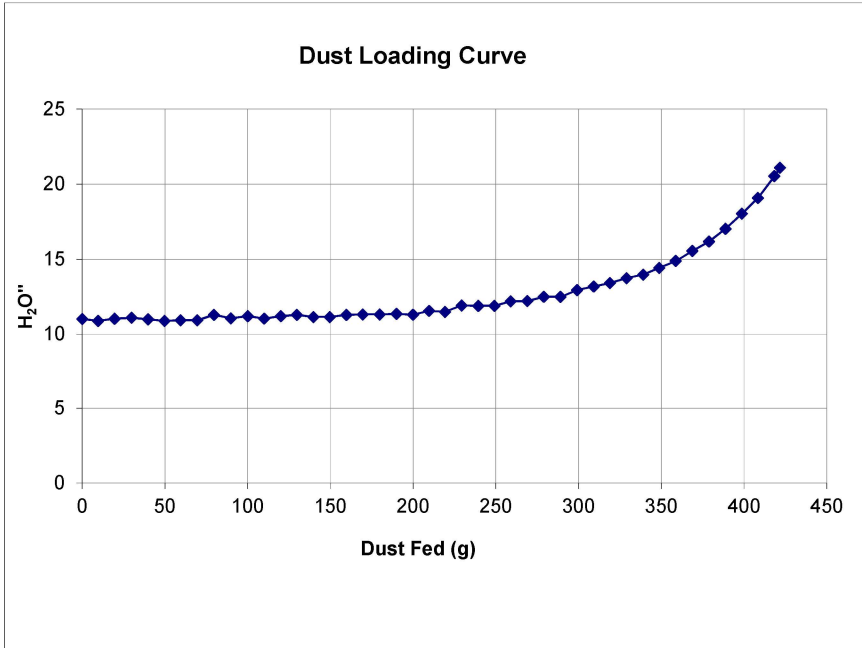


Test Description: 75-5163 2022+ TOYOTA TUNDRA PRODUCTION CAPACITY AND EFFICIENCY

Test Conditions	
Barometric Pressure: 28.722 in. Hg	Relative Humidity: 55 %
Air Flow Setpoint: 350 SCFM	Type of Dust: A4 COARSE
Test Procedure: FICIENCY	Batch #: 14057C
Air Flow Type: SCFM	Temperature: 69 deg. F
Test Endpoint: 10 in. H2O	Initial Add Rate: NaN g/min
Number of Pleats:	Accumulative Add Rate: 9.91 g/min
Flow Direction:	Pleat Depth: in.

Test Results			
Initial Delta P 10.75 in. H2O	Accumulative Capacity: 417.50 g		
	Test Time: 42.42 min		
		Initial	Accumulative
			Kit Blanket
Start			4468.40 593.46
End			4885.90 596.65
Gain			417.50 3.19
Efficiency			99.24%

- Standard Restriction
- Pressure Differential



Dust Loading Curve Data	
Dust Fed (g)	Pressure (H ₂ O)
0	11.021
9.622	10.907
19.51	11.043
29.827	11.11
39.846	11.008
49.637	10.899
59.418	10.928
69.447	10.931
79.619	11.297
89.784	11.071
99.91	11.211
109.865	11.054
119.9	11.203
129.653	11.287
139.727	11.15
149.512	11.16
159.593	11.29
169.489	11.325
179.683	11.321
189.851	11.367
199.807	11.315
209.545	11.571
219.239	11.508
229.183	11.937

Air Filter Restriction Test Report

Test #: 899
Sample #: 30R
Filter #:
Housing #:
Date Code: 45054

JJ
5/17/2023



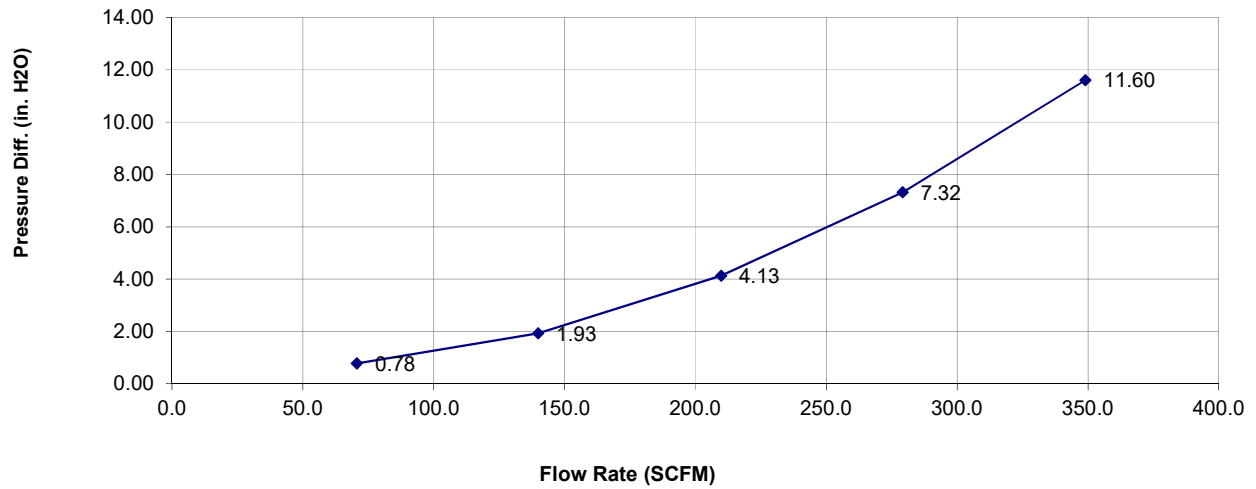
Test Description: 75-5163 2022+ TOYOTA TUNDRA PRODUCTION RESTRICTION KF-1090D, DRIVER SIDE, DRY 155 pleat count, CL

Test Conditions

Barometric Pressure: 28.91458 in. Hg
Air Flow Type: SCFM
Number of Pleats:
Flow Direction:

Relative Humidity: 54 %
Temperature: 69 deg. F
Pleat Depth: in.

Air Flow Curve



Air Flow Curve Data

<u>Flow Rate</u>	<u>Differential Pressure</u>
71	0.78
140	1.93
210	4.13
279	7.32
349	11.60

Air Filter Restriction Test Report

Test #: 899
Sample #: 31R
Filter #:
Housing #:
Date Code: 45054

JJ
5/17/2023



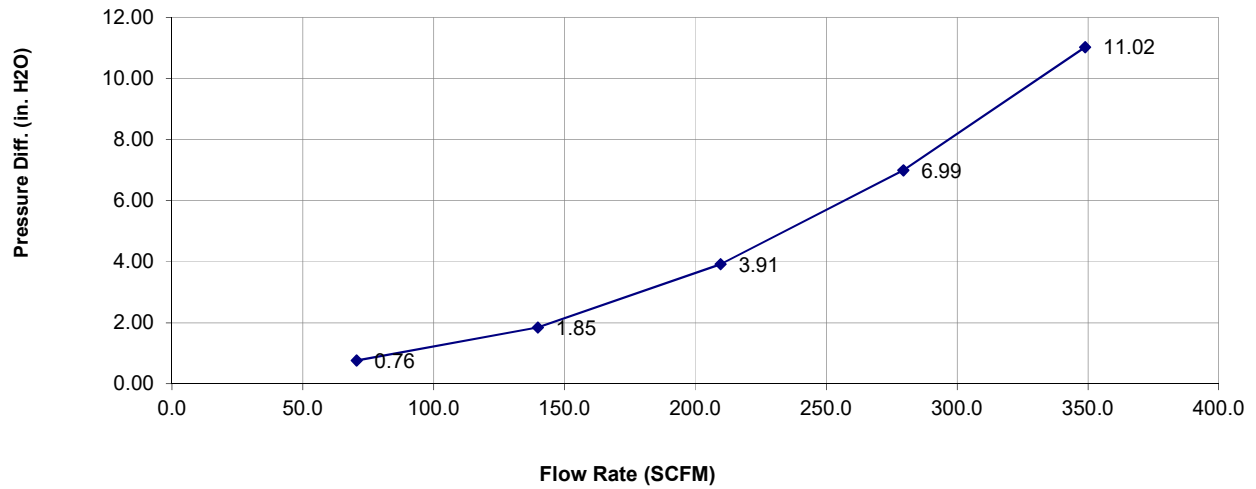
Test Description: 75-5163 2022+ TOYOTA TUNDRA PRODUCTION RESTRICTION KF-1090D, DRIVER SIDE, DRY 155 pleat count, OP

Test Conditions

Barometric Pressure: 28.91442 in. Hg
Air Flow Type: SCFM
Number of Pleats:
Flow Direction:

Relative Humidity: 54 %
Temperature: 69 deg. F
Pleat Depth: in.

Air Flow Curve



Air Flow Curve Data

<u>Flow Rate</u>	<u>Differential Pressure</u>
71	0.76
140	1.85
210	3.91
279	6.99
349	11.02

Air Filter Restriction Test Report

Test #: 899
Sample #: 32R
Filter #:
Housing #:
Date Code: 45054

JJ
5/17/2023



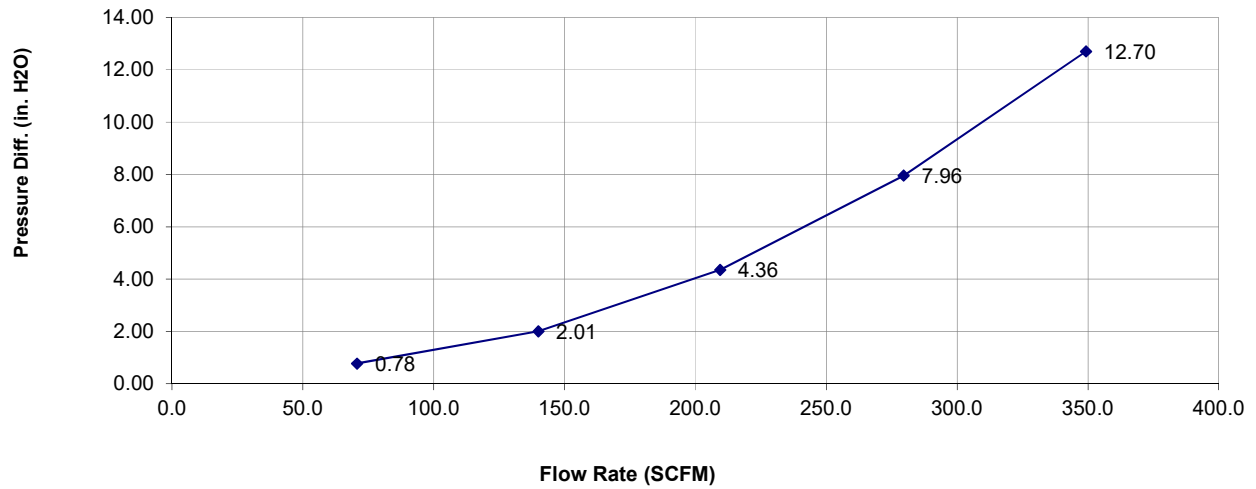
Test Description: 75-5163 2022+ TOYOTA TUNDRA PRODUCTION RESTRICTION KF-1090D, PASSANGER SIDE, DRY 155 pleat cour

Test Conditions

Barometric Pressure: 28.79792 in. Hg
Air Flow Type: SCFM
Number of Pleats:
Flow Direction:

Relative Humidity: 55 %
Temperature: 69 deg. F
Pleat Depth: in.

Air Flow Curve



Air Flow Curve Data

<u>Flow Rate</u>	<u>Differential Pressure</u>
71	0.78
140	2.01
209	4.36
280	7.96
349	12.70

Air Filter Restriction Test Report

Test #: 899
Sample #: 33R
Filter #:
Housing #:
Date Code: 45054

JJ
5/17/2023



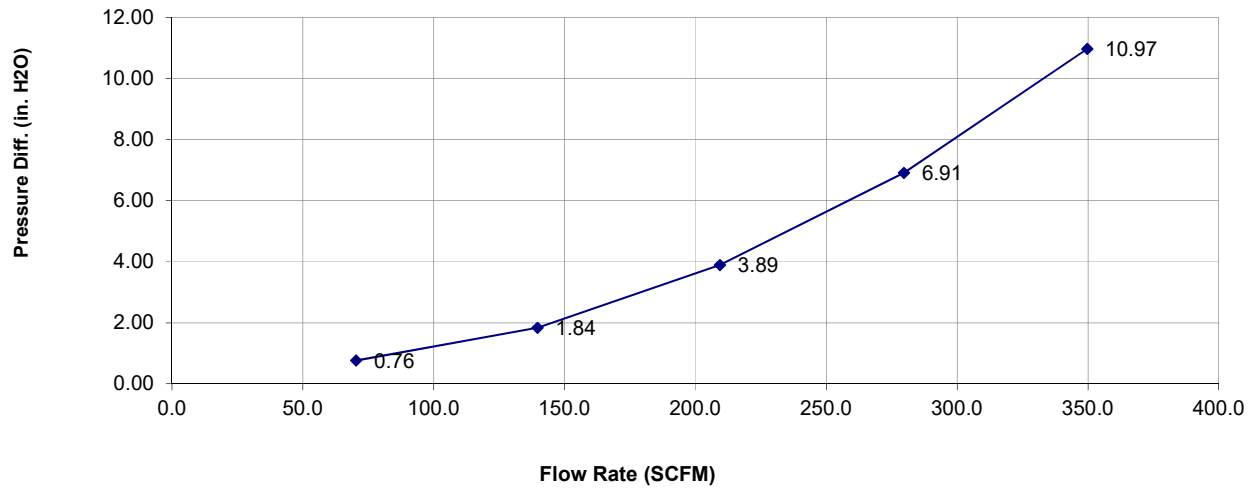
Test Description: 75-5163 2022+ TOYOTA TUNDRA PRODUCTION RESTRICTION KF-1090D, PASSANGER SIDE, DRY 155 pleat cour

Test Conditions

Barometric Pressure: 28.90028 in. Hg
Air Flow Type: SCFM
Number of Pleats:
Flow Direction:

Relative Humidity: 54 %
Temperature: 69 deg. F
Pleat Depth: in.

Air Flow Curve



Air Flow Curve Data

<u>Flow Rate</u>	<u>Differential Pressure</u>
70	0.76
140	1.84
209	3.89
280	6.91
350	10.97

Air Filter Full Life Efficiency Test Report

Test #: 899
Sample #: 37CE
Filter #:
Housing #:
Date Code: 45055

Operator: JJ
Report Date: 5/17/2023
Filter Mfg.:
Housing Mfg.:



Test Description: 75-5163 2022+ TOYOTA TUNDRA PRODUCTION CAPACITY AND EFFICIENCY,KF-1090, DRY

Test Conditions

Barometric Pressure:	28.880 in. Hg	Relative Humidity:	53 %
Air Flow Setpoint:	350 SCFM	Type of Dust:	A4 COARSE
Test Procedure:	EFFICIENCY	Batch #:	14057C
Air Flow Type:	SCFM	Temperature:	69 deg. F
Test Endpoint:	10 in. H2O	Initial Add Rate:	NaN g/min
Number of Pleats:		Accumulative Add Rate:	9.91 g/min
Flow Direction:		Pleat Depth:	in.

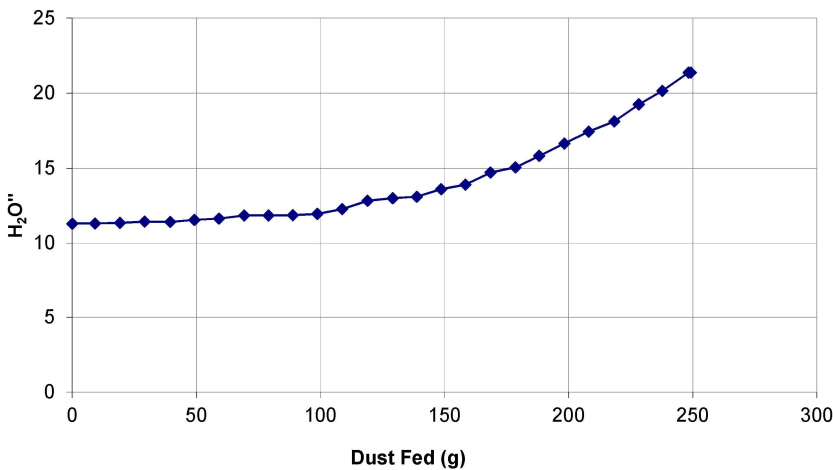
Test Results

Initial Delta P 10.91 in. H2O Accumulative Capacity: 246.60 g
Test Time: 25.12 min

	Initial		Accumulative	
			Kit	Blanket
Start			4269.30	599.14
End			4515.90	600.23
Gain			246.60	1.09
Efficiency			99.56%	

- Standard Restriction
- Pressure Differential

Dust Loading Curve



Dust Loading Curve Data

Dust Fed (g)	Pressure ("H2O)
0	11.314
9.149	11.327
19.172	11.363
29.234	11.452
39.473	11.44
49.252	11.564
59.088	11.651
69.216	11.859
79.089	11.858
88.801	11.884
98.758	11.959
108.791	12.291
118.943	12.844
129.064	13.004
138.743	13.109
148.617	13.601
158.358	13.921
168.482	14.719
178.511	15.064
188.155	15.829
198.231	16.66
208.002	17.437
218.315	18.13
228.296	19.253