# Reduced Volume - Improved Performance - Flexible Packaging

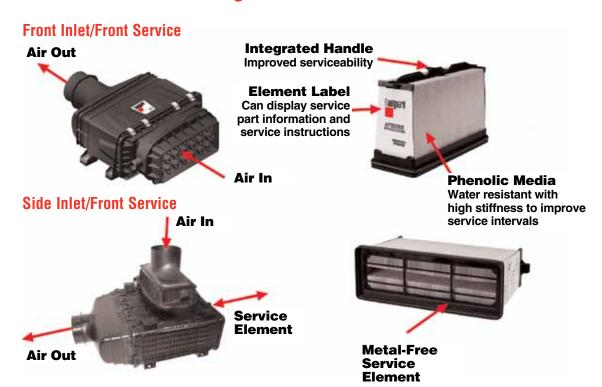
The patented Direct Flow technology provides the flexibility to optimize the air system performance to size ratio, meeting the demands of today's engines and specialized applications.





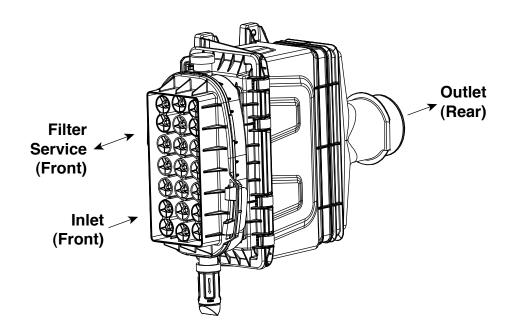
Direct Flow™ design utilizes more media volume in less space than some cylindrical systems

# The Direct Flow Advantage





FIOWTM



Specification	AH55555
Length, Overall	10.01" (254.3 mm)
Width, Overall	25.30" (642.6 mm)
Height, Overall	22.29" (566.2 mm)
Flow, Min. (2" restriction)	195 CFM (5.52 m³/min)
Flow, Max. (12" restriction)	544 CFM (15.41 m³/min)
Secondary Element	Yes
Housing Material	Glass-Filled Polyamide
Pre-cleaner Integral	Yes
Inlet Transition	No

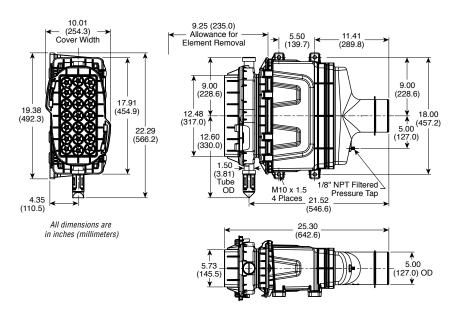


Air Cleaners		
Part Number Description		
AH55555	Direct Flow DF600P -with Integral Pre-Cleaner -Front Inlet	

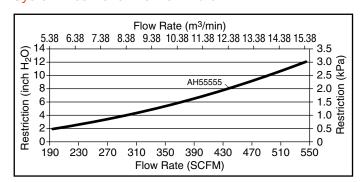
Accessories		
Part Number	Description	
3316658 S	4" Band Clamp	
3316660 S	5" Band Clamp	
3316608 S	4" Hump Hose	
3316610 S	5" Hump Hose	
3316568 S	4" 90° Elbow	
3316570 S	5" 90° Elbow	
3316618 S	5" to 4" Hump Hose Reducer	
3946329 S	Restriction Indicator	

Service Parts		
Part Number Description		
AF55005	Primary Element	
AF55308	Secondary Element	
SP01004 Service Kit: DEV Tube, DEV Cap, J-Clips (4)		

## **Dimensions**

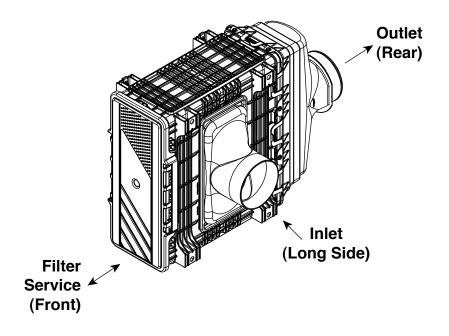


### **Performance**



Restr	iction	Flow	Rate
in H <sub>2</sub> O	kPa	CFM	m³/min
6	1.5	371	10.51
8	2.0	436	12.33
10	2.5	492	13.94
12	3.0	544	15.39





Specification	AH55556
Length, Overall	12.69" (322.3 mm)
Width, Overall	24.54" (623.3 mm)
Height, Overall	17.67" (448.8 mm)
Flow, Min. (2" restriction)	234 CFM (6.63 m³/min)
Flow, Max. (12" restriction)	652 CFM (18.46 m³/min)
Secondary Element	Yes
Housing Material	Glass-Filled Polyamide
Pre-cleaner Integral	No
Inlet Transition	Yes



Air Cleaners		
Part Number Description		
AH55556	Direct Flow DF900T -with Inlet Transition -Long Side Inlet	

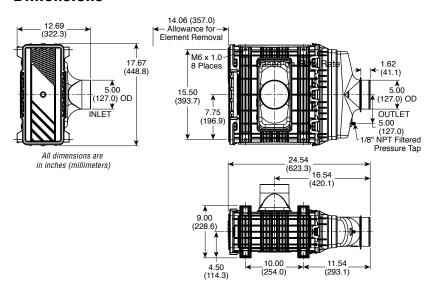
Service Parts		
Part Number Description		
AF55014	Primary Element	
AF55308	Secondary Element	
SP01002	Service Door	
SP01004 Service Kit: DEV Tube, DE Cap, J-Clips (4)		

Accessories		
Part Number	Description	
3316658 S	4" Band Clamp	
3316660 S	5" Band Clamp	
3316608 S	4" Hump Hose	
3316610 S	5" Hump Hose	
3316568 S	4" 90° Elbow	
3316570 S	5" 90° Elbow	
3316618 S	5" to 4" Hump Hose Reducer	
3946466 S	Weather Hood	
3946329 S	Restriction Indicator	

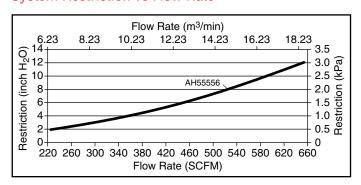
Accessories		
Part Number Description		
*AP8409	Fleetguard® External Pre- Cleaner (Flow=275-350 CFM)	
*AP8421	Fleetguard External Pre- Cleaner (Flow=350-500 CFM)	
*AP8404	Fleetguard External Pre- Cleaner (Flow=500-650 CFM)	
*AP8410	Fleetguard External Pre- Cleaner (Flow=650-800 CFM)	

<sup>\*</sup> Based on Flow Rate

## **Dimensions**

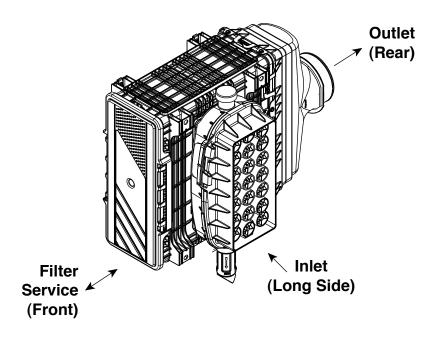


### **Performance**



Restriction		Flow Rate	
in H <sub>2</sub> O	kPa	CFM	m³/min
6	1.5	447	12.66
8	2.0	524	14.84
10	2.5	591	16.74
12	3.0	652	18.46





Specification	AH55557
Length, Overall	13.02" (330.7 mm)
Width, Overall	24.54" (623.3 mm)
Height, Overall	21.59" (548.4 mm)
Flow, Min. (2" restriction)	200 cfm (5.66 m³/min)
Flow, Max. (12" restriction)	541 cfm (15.32 m³/min)
Secondary Element	Yes
Housing Material	Glass-Filled Polyamide
Pre-cleaner Integral	Yes
Inlet Transition	No

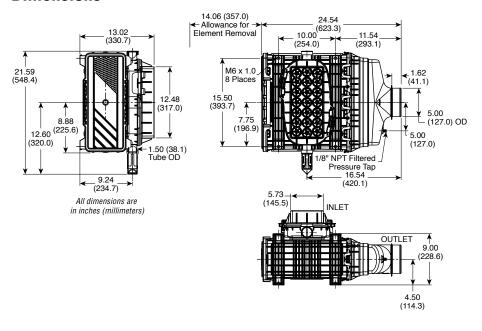


Air Cleaners	
Part Number Description	
AH55557	Direct Flow DF900P -with Integral Pre-Cleaner -Long Side Inlet

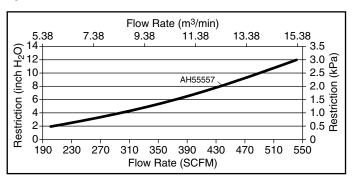
Accessories		
Part Number Description		
3316658 S	4" Band Clamp	
3316660 S	5" Band Clamp	
3316608 S	4" Hump Hose	
3316610 S	5" Hump Hose	
3316568 S	4" 90° Elbow	
3316570 S	5" 90° Elbow	
3316618 S	5" to 4" Hump Hose Reducer	
3946329 S	Restriction Indicator	

Service Parts		
Part Number Description		
AF55014	Primary Element	
AF55308	Secondary Element	
SP01002	Service Door	
SP01004	Service Kit: DEV Tube, DEV Cap, J-Clips (4)	

# **Dimensions**

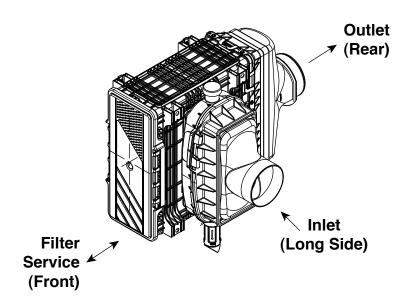


# **Performance**



Restriction		Flow Rate	
in H <sub>2</sub> O	kPa	CFM	m³/min
6	1.5	373	10.56
8	2.0	436	12.35
10	2.5	491	13.90
12	3.0	541	15.32





Specification	AH55558
Length, Overall	17.67" (448.8 mm)
Width, Overall	24.54" (623.3 mm)
Height, Overall	21.59" (548.4 mm)
Flow, Min. (2" restriction)	193 CFM (5.47 m³/min)
Flow, Max. (12" restriction)	526 CFM (14.89 m³/min)
Secondary Element	Yes
Housing Material	Glass-Filled Polyamide
Pre-cleaner Integral	Yes
Inlet Transition	Yes

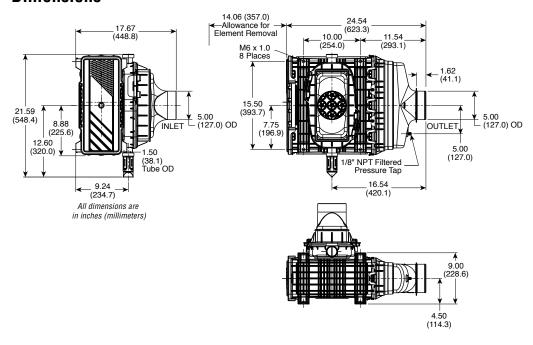


Air Cleaners		
Part Number Description		
AH55558	Direct Flow DF900C -with Inlet Transition -with Integral Pre-Cleaner -Long side inlet	

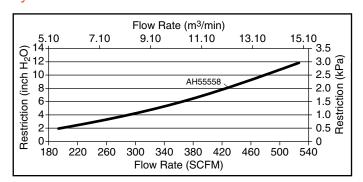
Accessories		
Part Number	Description	
3316658 S	4" Band Clamp	
3316660 S	5" Band Clamp	
3316608 S	4" Hump Hose	
3316610 S	5" Hump Hose	
3316568 S	4" 90° Elbow	
3316570 S	5" 90° Elbow	
3316618 S	5" to 4" Hump Hose Reducer	
3946329 S	Restriction Indicator	

Service Parts		
Part Number Description		
AF55014	Primary Element	
AF55308	Secondary Element	
SP01002	Service Door	
SP01004	Service Kit: DEV Tube, DEV Cap, J-Clips (4)	

# **Dimensions**

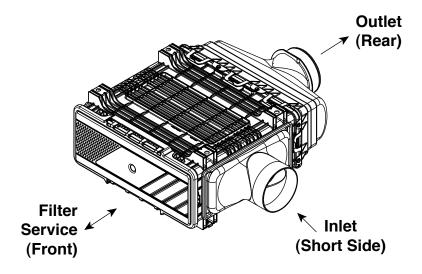


### **Performance**



Restriction		Flow Rate	
in H <sub>2</sub> O	kPa	CFM	m³/min
6	1.5	363	10.28
8	2.0	424	12.00
10	2.5	478	13.54
12	3.0	526	14.89





Specification	AH55559
Length, Overall	22.08" (560.8 mm)
Width, Overall	24.54" (623.3 mm)
Height, Overall	9.00" (228.6 mm)
Flow, Min. (2" restriction)	225 CFM (6.37 m³/min)
Flow, Max. (12" restriction)	620 CFM (17.56 m³/min)
Secondary Element	Yes
Housing Material	Glass-Filled Polyamide
Pre-cleaner Integral	No
Inlet Transition	Yes



Air Cleaners	
Part Number Description	
AH55559	Direct Flow DF900T -with Inlet Transition -Short Side Inlet

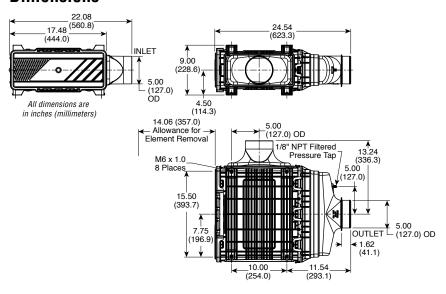
Service Parts		
Part Number Description		
AF55014	Primary Element	
AF55308	Secondary Element	
SP01002	Service Door	
SP01004 Service Kit: DEV tube, DEV Cap, J-Clips (4)		

Accessories	
Part Number	Description
3316658 S	4" Band Clamp
3316660 S	5" Band Clamp
3316608 S	4" Hump Hose
3316610 S	5" Hump Hose
3316568 S	4" 90° Elbow
3316570 S	5" 90° Elbow
3316618 S	5" to 4" Hump Hose Reducer
3946466 S	Weather Hood
3946329 S	Restriction Indicator

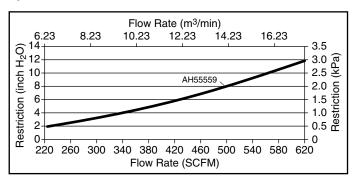
Accessories	
Part Number	Description
*AP8409	Fleetguard External Pre- Cleaner (Flow=275-350 CFM)
*AP8421	Fleetguard External Pre- Cleaner (Flow=350-500 CFM)
*AP8404	Fleetguard External Pre- Cleaner (Flow=500-650 CFM)

<sup>\*</sup> Based on Flow Rate

# **Dimensions**

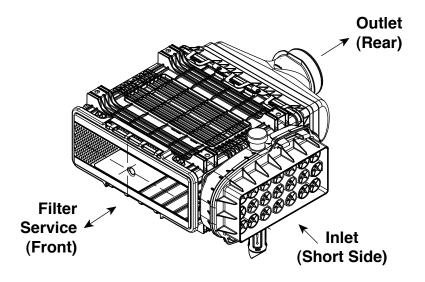


# **Performance**



Restriction		Flow Rate	
in H <sub>2</sub> O	kPa	CFM	m³/min
6	1.5	426	12.06
8	2.0	499	14.13
10	2.5	562	15.91
12	3.0	620	17.56





Specification	AH55560
Length, Overall	22.41" (569.2 mm)
Width, Overall	24.54" (623.3 mm)
Height, Overall	14.84" (376.9 mm)
Flow, Min. (2" restriction)	191 CFM (5.41 m³/min)
Flow, Max. (12" restriction)	524 CFM (14.84 m³/min)
Secondary Element	Yes
Housing Material	Glass-Filled Polyamide
Pre-cleaner Integral	Yes
Inlet Transition	No

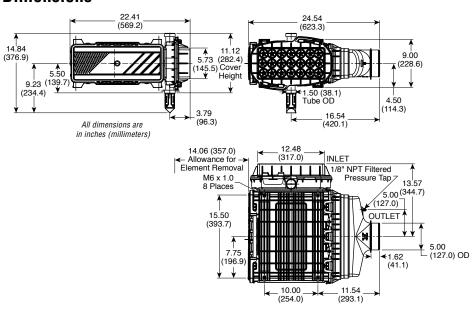


Air Cleaners	
Part Number	Description
AH55560	Direct Flow DF900P -with Integral Pre-Cleaner -Short Side Inlet

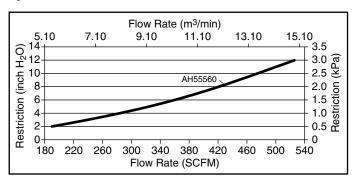
Accessories	
Part Number	Description
3316658 S	4" Band Clamp
3316660 S	5" Band Clamp
3316608 S	4" Hump Hose
3316610 S	5" Hump Hose
3316568 S	4" 90° Elbow
3316570 S	5" 90° Elbow
3316618 S	5" to 4" Hump Hose Reducer
3946329 S	Restriction Indicator

Service Parts	
Part Number	Description
AF55014	Primary Element
AF55308	Secondary Element
SP01002	Service Door
SP01004	Service Kit: DEV Tube, DEV Cap, J-Clips (4)

## **Dimensions**

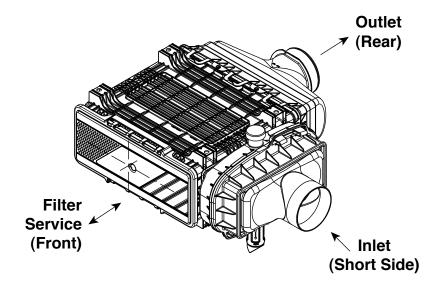


# **Performance**



Restriction		Flow Rate	
in H <sub>2</sub> O	kPa	CFM	m³/min
6	1.5	360	10.19
8	2.0	421	11.92
10	2.5	475	13.45
12	3.0	524	14.84





Specification	AH55561
Length, Overall	27.06" (687.3 mm)
Width, Overall	24.54 " (623.3 mm)
Height, Overall	14.84" (376.9 mm)
Flow, Min. (2" restriction)	183 CFM (5.18 m³/min)
Flow, Max. (12" restriction)	494 CFM (13.99 m³/min)
Secondary Element	Yes
Housing Material	Glass-Filled Polyamide
Pre-cleaner Integral	Yes
Inlet Transition	Yes

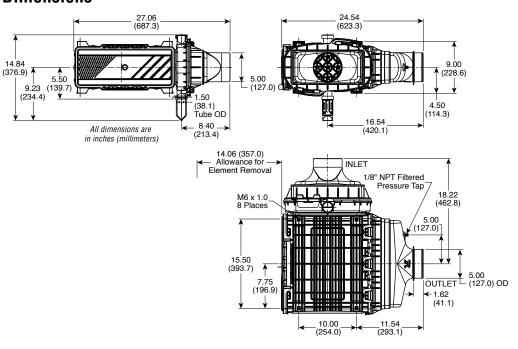


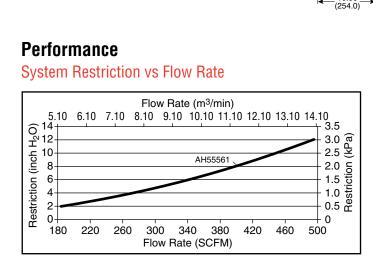
Air Cleaners	
Part Number	Description
AH55561	Direct Flow DF900C -with Inlet Transition -with Integral Pre-Cleaner -Short Side Inlet

Accessories		
Part Number	Description	
3316658 S	4" Band Clamp	
3316660 S	5" Band Clamp	
3316608 S	4" Hump Hose	
3316610 S	5" Hump Hose	
3316568 S	4" 90° Elbow	
3316570 S	5" 90° Elbow	
3316618 S	5" to 4" Hump Hose Reducer	
3946466 S	Weather Hood	
3946329 S	Restriction Indicator	

Service Parts	
Part Number	Description
AF55014	Primary Element
AF55308	Secondary Element
SP01002	Service Door
SP01004	Service Kit: DEV Tube, DEV Cap, J-Clips (4)

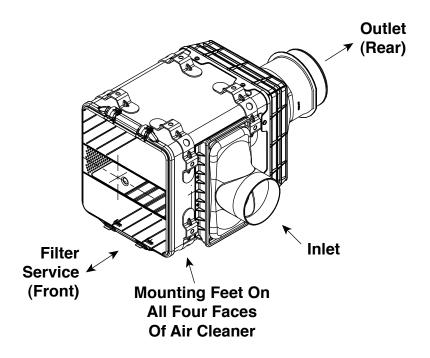
## **Dimensions**





Restriction		Flow Rate	
in H <sub>2</sub> O	kPa	CFM	m³/min
6	1.5	340	9.63
8	2.0	398	11.27
10	2.5	448	12.69
12	3.0	494	13.99





Specification	AH55562
Length, Overall	18.46" (468.9 mm)
Width, Overall	25.00" (635.0 mm)
Height, Overall	14.55" (369.6 mm)
Flow, Min. (2" restriction)	294 CFM (8.33 m³/min)
Flow, Max. (12" restriction)	797 CFM (22.57 m³/min)
Secondary Element	Yes
Housing Material	Metal/Glass-FIlled Polyamide
Pre-cleaner Integral	No
Inlet Transition	Yes



Air Cleaners		
Part Number Description		
AH55562	Direct Flow DF1200T -with Inlet Transition	

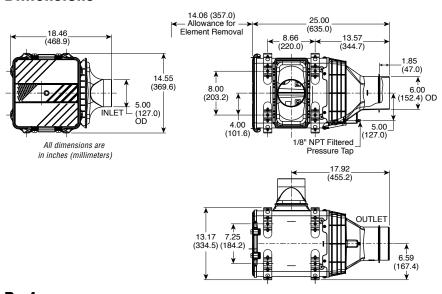
Service Parts		
Part Number Description		
AF55015 Primary Element		
AF55309	Secondary Element	
SP01003 Service Door		

Accessories		
Part Number	er Description	
3316658 S	4" Band Clamp	
3316660 S	5" Band Clamp	
3316662 S	6" Band Clamp	
3316608 S	4" Hump Hose	
3316610 S	5" Hump Hose	
3316612 S	6" Hump Hose	
3316568 S	4" 90° Elbow	
3316570 S	5" 90° Elbow	
3316573 S	6" 90° Elbow	
3316589 S	6" to 5" Reducing Elbow	
3316618 S	5" to 4" Hump Hose Reducer	
3316621 S	6" to 5" Hump Hose Reducer	
3946466 S	Weather Hood	
3946329 S	Restriction Indicator	

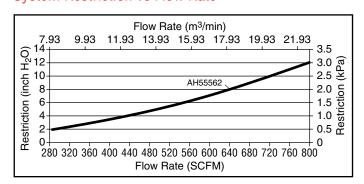
Accessories			
Part Number Description			
*AP8404	Fleetguard External Pre- Cleaner (Flow=275-350 CFM)		
*AP8421	Fleetguard External Pre- Cleaner (Flow=350-500 CFM)		
*AP8404	Fleetguard External Pre- Cleaner (Flow=500-650 CFM)		
*AP8410	Fleetguard External Pre- Cleaner (Flow=650-800 CFM)		

<sup>\*</sup> Based on Flow Rate

# **Dimensions**

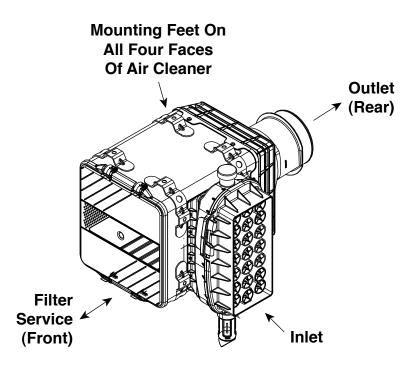


### **Performance**



Restriction		Flow Rate	
in H <sub>2</sub> O	kPa	CFM	m³/min
6	1.5	551	15.60
8	2.0	643	18.21
10	2.5	724	20.50
12	3.0	797	22.57





•	
Specification	AH55563
Length, Overall	18.78" (477.0 mm)
Width, Overall	25.00" (635.0 mm)
Height, Overall	21.78" (553.2 mm)
Flow, Min. (2" restriction)	266 CFM (7.53 m³/min)
Flow, Max. (12" restriction)	737 CFM (20.87 m³/min)
Secondary Element	Yes
Housing Material	Metal/Glass-Filled Polyamide
Pre-cleaner Integral	Yes
Inlet Transition	No

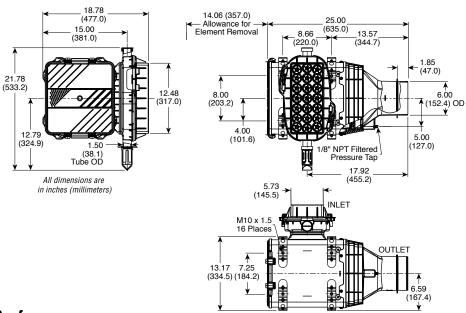


Air Cleaners		
Part Number Description		
AH55563	Direct Flow DF1200P -with Integral Pre-Cleaner	

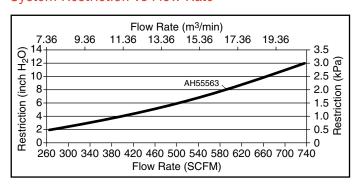
Accessories		
Part Number	Description	
3316658 S	4" Band Clamp	
3316660 S	5" Band Clamp	
3316662 S	6" Band Clamp	
3316608 S	4" Hump Hose	
3316610 S	5" Hump Hose	
3316612 S	6" Hump Hose	
3316568 S	4" 90° Elbow	
3316570 S	5" 90° Elbow	
3316573 S	6" 90° Elbow	
3316589 S	6" to 5" Reducing Elbow	
3316618 S	5" to 4" Hump Hose Reducer	
3316621 S	6" to 5" Hump Hose Reducer	
3946329 S	Restriction Indicator	

Service Parts		
Part Number Description		
AF55015	Primary Element	
AF55309	Secondary Element	
SP01003	Service Door	
SP01004	Service Kit: DEV Tube, DEV Cap, J-Clips (4)	

# **Dimensions**

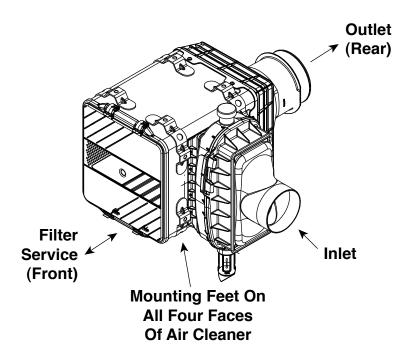


### **Performance**



Restriction		Flow Rate	
in H <sub>2</sub> O	kPa	CFM	m³/min
6	1.5	503	14.24
8	2.0	590	16.71
10	2.5	667	18.89
12	3.0	737	20.87





Specification	AH55564
Length, Overall	23.43" (595.1 mm)
Width, Overall	25.00" (635.0 mm)
Height, Overall	21.78" (553.2 mm)
Flow, Min. (2" restriction)	251 CFM (7.11 m³/min)
Flow, Max. (12" restriction)	699 CFM (19.79 m³/min)
Secondary Element	Yes
Housing Material	Metal/Glass-Filled Polyamide
Pre-cleaner Integral	Yes
Inlet Transition	Yes



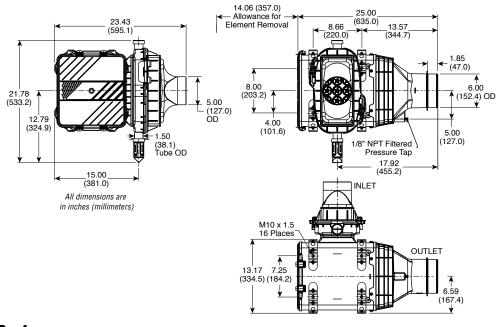
Air Cleaners	
Part Number Description	
AH55564	Direct Flow DF1200C -with Inlet Transition -with Integral Pre-Cleaner

Service Parts	
Part Number	Description
AF55015	Primary Element
AF55309	Secondary Element
SP01003	Service Door
SP01004	Service Kit: DEV Tube, DEV Cap, J-Clips (4)

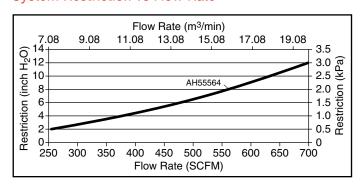
Accessories		
Part Number	Description	
3316658 S	4" Band Clamp	
3316660 S	5" Band Clamp	
3316662 S	6" Band Clamp	
3316608 S	4" Hump Hose	
3316610 S	5" Hump Hose	
3316612 S	6" Hump Hose	
3316568 S	4" 90° Elbow	

Accessories	
Part Number	Description
3316570 S	5" 90° Elbow
3316573 S	6" 90° Elbow
3316589 S	6" to 5" Reducing Elbow
3316618 S	5" to 4" Hump Hose Reducer
3316621 S	6" to 5" Hump Hose Reducer
3946466 S	Weather Hood
3946329 S	Restriction Indicator

## **Dimensions**



### **Performance**



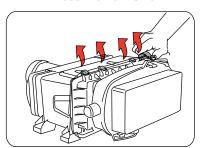
Restriction		Flow Rate	
in H <sub>2</sub> O	kPa	CFM	m³/min
6	1.5	478	13.54
8	2.0	560	15.86
10	2.5	633	17.93
12	3.0	699	19.79



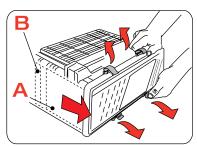
# Servicing the Direct Flow™ Air Cleaners

1. Open the metal latches to remove the service cover.

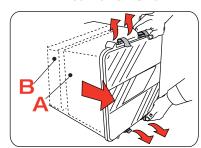
**DF600 Element Size** 



**DF900 Element Size** 

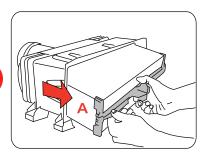


**DF1200 Element Size** 

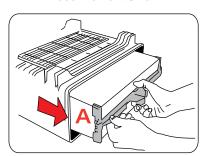


2. Remove the primary element. .

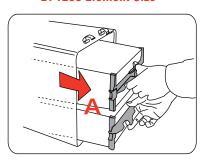
**DF600 Element Size** 



**DF900 Element Size** 

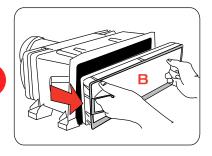


**DF1200 Element Size** 

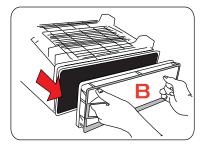


3. Remove the secondary element. .

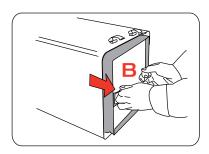
**DF600 Element Size** 



**DF900 Element Size** 

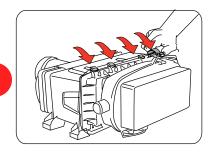


**DF1200 Element Size** 

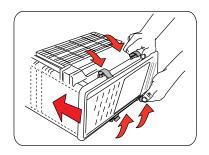


4. Replace the primary and secondary elements in the same order and close the metal latches. .

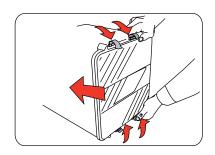
**DF600 Element Size** 



**DF900 Element Size** 



**DF1200 Element Size** 





## Direct Flow™ Frequently Asked Questions

### Why are two types of Direct Flow™ models available?

The Cummins applied models are manufactured with a TBAP (Temperature Barometric Air Pressure) sensor that is tailored for specifics of a Cummins applied engine system. The standard models are manufactured for a broader range of systems.

# How is Direct Flow™ different from a traditional cylindrical air cleaner?

The Direct Flow filter element utilizes a rectangular "V-Block" configuration which allows the filter media to be packaged in a smaller volume, improving performance while reducing size. The rectangular design allows the Direct Flow air cleaner to take advantage of the wasted space in the inner diameter of the conventional air cleaner. The benefits of Direct Flow system are an increase in total dust holding capacity and a decrease in size. These features allow for a longer service interval, less maintenance and vehicle down time, a lower cost of ownership, and the ability to mount the air cleaner in location previously unobtainable with a conventional air cleaner. The Direct Flow air cleaner also includes an integrated pre-cleaner and integrated mounting feet.

#### How long will it last?

The Direct Flow™ air cleaner has been designed to package the optimal amount of filter media in the smallest volume, increasing life and service interval. Compared to an equivalent traditional cylindrical air cleaner, the Direct Flow air cleaner will outperform and outlast conventional cylindrical air cleaners.

#### Where can I get replacement Elements?

Direct Flow aftermarket replacement filter elements and service parts will be available at hundreds of Cummins Filtration® and Fleetguard® worldwide retail locations. Visit cumminsfiltration.com for the nearest location.

#### How do I mount this air cleaner?

The Direct Flow air cleaners have integrated mounting feet on both the top and bottom sides of the housing which allow for easier and more convenient installations. Additional mounting band clamps are no longer required as compared to the conventional cylindrical air cleaners. The Direct Flow air cleaner can be mounted either vertically or horizontally.

#### What does the sensor do?

The sensor is located in the outlet of the air cleaner housing, which provides a consistent location for the sensor while communicating air flow data to the ECM, optimizing engine and system performance.

### Why is Direct Flow required for Tier 4?

The Direct Flow air cleaner has been designed and integrated with the Cummins Engine Business in order to understand and match the engine performance requirements and industrial specifications for the air intake system. The sensor must be mounted at a specific location in the airstream for accurate calculations, therefore, the Direct Flow housing has been specifically designed to minimize variation and achieve optimized system performance.

### What does a pre-cleaner do?

A pre-cleaner is used to remove about 75% of all incoming dust from reaching the filter element. A pre-cleaner uses centrifugal force to move dust particles out of the air stream and then expels these particles back into the environment.

#### What is aspiration?

Aspirating the air cleaner increases the efficiency of the precleaner by pulling a small vacuum and extracting the large dust particles from the pre-cleaner. Typically, the efficiency of most pre-cleaners is 75%, an aspirated pre-cleaner is normally 90% efficient. This increase in efficiency increases the life of the filter element about 250%. Aspirating the air cleaner is done by installing an aspirator within the exhaust flow; the aspirator uses a venturi to create a pressure differential which provides the vacuum pressure to the air cleaner. For more information, contact Technical Assistance at 1-800-22FILTER.

### Can Direct Flow™ be used for Tier 3 applications?

Absolutely. The Direct Flow™ air cleaner has been designed to operate in any air filtration environment.



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# **Innovative Design Meets All OEM Requirements**

Cummins Filtration® has revolutionized air filtration design with the introduction of its patented Fleetguard® OptiAir™ technology. OptiAir systems address key design requirements of all equipment manufacturers:

- Reduction in system size to fit shrinking engine compartments
- Higher dust holding capacity to extend service intervals
- Two-stage air housing design to extend filter life
- Lower system restriction to deliver maximum engine performance
- Reduced service time to lower maintenance costs
- Secondary element optional



# The OptiAir Advantage

### **Outlet Options**

Systems available in both straight and 90° rotatable designs

### **Pressure Tap**

Easy-to-install filter restriction gauge option

# **Highly Durable Resin Construction**Plastic or metal mounting options

#### Optional Secondary Element Design Added engine protection

Two-Stage Air Housing Design

Removes large particulates, extending filter life







Mono Latch Twist Lock™ Cover with Multi-Locking Positions Installation flexibility, easy to service,

reduced maintenance time

**Dust Ejection Valve** Removal of large particulates and moisture

**Increased Filter Media Area** Greater capacity - longer filter life

Increased Outlet Area Increased area resulting in reduced restriction

**Highly Resistant Urethane Seal** 

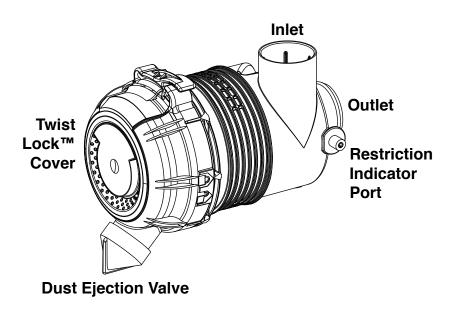
**Excellent sealing capacity** 







# OptiAir.



# **Specifications**

Specification	AH19474	AH19496
Length Overall	9.3" (237.1 mm)	9.3" (237.1 mm)
Cover OD	5.6" (141.6 mm)	5.6" (141.6 mm)
Flow, Min. (2" restriction)	38 CFM (1.1 m³/min)	30 CFM (0.8 m³/min)
Flow, Max. (12" restriction)	102 CFM (2.9 m³/min)	83 CFM (2.4 m³/min)
Secondary Element	No	Yes
Housing Material	Glass-Filled Polypropylene	Glass-Filled Polypropylene
Pre-Cleaner Integral	Yes	Yes
Outlet	Straight	Straight

# **Dust Holding Capacity per Cummins® Specification**

Specification	AH19474	AH19496
Allowable Flow for 10 g/CFM	< 63 CFM (1.8 m³/min)	< 57 CFM (1.6 m³/min)
Allowable Flow for 25 g/CFM	< 35 CFM (1.0 m³/min)	< 34 CFM (1.0 m³/min)

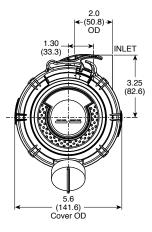


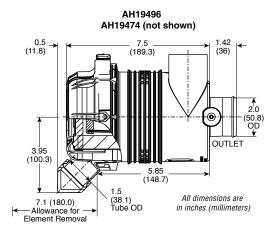
Air Cleaners	
Part Number	Description
AH19474	OptiAir™ 400 Series Air Cleaner – without Secondary Element – with Straight Outlet
AH19496	OptiAir 400 Series Air Cleaner – with Secondary Element – with Straight Outlet

Accessories	
Part Number	Description
3918199 S	Mounting Bracket
1	No. of Brackets Required
3316653 S	Outlet Band Clamps
3918194 S	Weather Hood
N/A	Hump-Hose
3316564 S	90° Elbow
N/A	90° Reducing Elbow
3946326 S	Restriction Indicator

Service Parts	
Part Number	Description
AF26116	Primary Element
N/A	Magnum Primary Element
AF26167	Secondary Element
3946457 S	Dust Ejection Valve
3946459 S	Cover Assembly

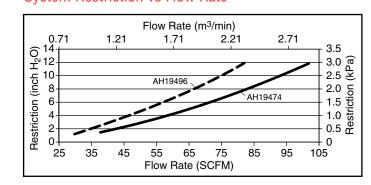
## **Dimensions**



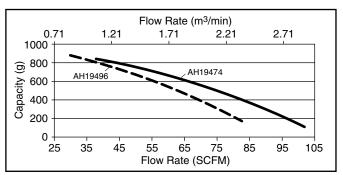


# **Performance**

## System Restriction vs Flow Rate



### Typical System Capacity vs Flow Rate

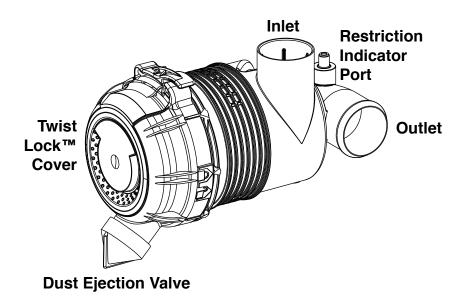


Restriction		Flow Rate ( ) = with Secondary		Typical Capacity ( ) = with Secondary
in H <sub>2</sub> O	kPa	CFM	m³/min	grams
6	1.5	70 (55)	1.98 (1.56)	571 (610)
8	2.0	82 (65)	2.32 (1.84)	420 (465)
10	2.5	93 (74)	2.63 (2.10)	257 (329)
12	3.0	102 (83)	2.89 (2.35)	115 (170)

ISO Coarse Dust 2.0 g/m³ Feed Rate 6.25 kPa (25" H<sub>2</sub>0) Terminal Restriction



# OptiAir.



# **Specifications**

Specification	AH19485	AH19484
Length Overall	10.4" (263.3 mm)	10.4" (263.3 mm)
Cover OD	5.6" (141.6 mm)	5.6" (141.6 mm)
Flow, Min. (2" restriction)	35 CFM (1.0 m³/min)	25 CFM (0.7 m³/min)
Flow, Max. (12" restriction)	92 CFM (2.6 m³/min)	80 CFM (2.3 m³/min)
Secondary Element	No	Yes
Housing Material	Glass-Filled Polypropylene	Glass-Filled Polypropylene
Pre-cleaner Integral	Yes	Yes
Outlet	90° Elbow	90° Elbow

# **Dust Holding Capacity per Cummins® Specification**

Specification	AH19485	AH19484
Allowable Flow for 10 g/CFM	< 57 CFM (1.6 m³/min)	< 55 CFM (1.6 m³/min)
Allowable Flow for 25 g/CFM	< 32 CFM (0.9 m³/min)	< 31 CFM (0.9 <sup>m3</sup> /min)

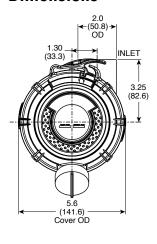


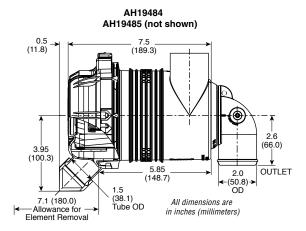
Air Cleaners		
Part Number	Description	
AH19485	OptiAir™ 400 Series Air Cleaner – without Secondary Element – with 90° Outlet	
AH19484	OptiAir 400 Series Air Cleaner – with Secondary Element – with 90° Outlet	

Accessories		
Part Number	Description	
3918199 S Mounting Bracket		
1	No. of Brackets Required	
3316653 S	Outlet Band Clamps	
3918194 S	Weather Hood	
N/A Hump-Hose		
3316564 S	90° Elbow	
N/A	90° Reducing Elbow	
3946326 S	Restriction Indicator	

Service Parts		
Part Number Description		
AF26116	Primary Element	
N/A	Magnum Primary Element	
AF26167	Secondary Element	
3946457 S	Dust Ejection Valve	
3946459 S	Cover Assembly	

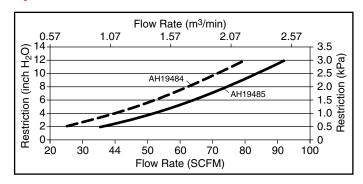
## **Dimensions**



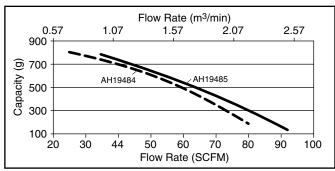


### **Performance**

## System Restriction vs Flow Rate



## Typical System Capacity vs Flow Rate

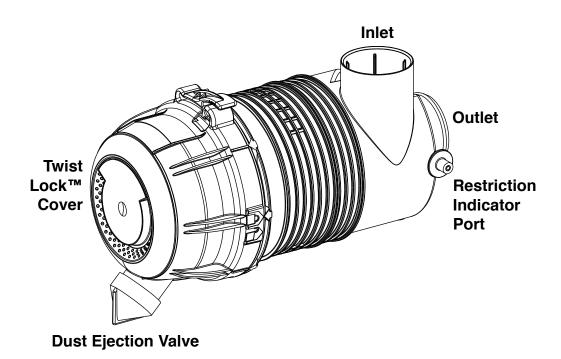


Restriction		Flow Rate ( ) = with Secondary		Typical Capacity ( ) = with Secondary
in H <sub>2</sub> O	kPa	CFM	m³/min	grams
6	1.5	64 (52)	1.81 (1.47)	502 (580)
8	2.0	75 (63)	2.12 (1.78)	364 (450))
10	2.5	84 (72)	2.38 (2.04)	250 (320))
12	3.0	92 (80)	2.61 (2.27)	135 (190)

ISO Coarse Dust 2.0 g/m³ Feed Rate 6.25 kPa (25" H<sub>2</sub>O) Terminal Restriction



# OptiAir.



# **Specifications**

Specification	AH19483	AH19482
Length Overall	13.1" (332.3 mm)	13.1" (332.3 mm)
Cover OD	6.5" (166.0 mm)	6.5" (166.0 mm)
Flow, Min. (2" restriction)	60 CFM (1.7 m <sup>3</sup> /min)	45 CFM (1.3 m³/min)
Flow, Max. (12" restriction)	163 CFM (4.6 m³/min)	120 CFM (3.4 m³/min)
Secondary Element	No	Yes
Housing Material	Glass-Filled Polypropylene	Glass-Filled Polypropylene
Pre-cleaner Integral	Yes	Yes
Outlet	Straight	Straight

# **Dust Holding Capacity per Cummins® Specification**

Specification	AH19483	AH19482
Allowable Flow for 10 g/CFM	< 141 CFM (4.0 m³/min)	< 116 CFM (3.3 m <sup>3</sup> /min)
Allowable Flow for 25 g/CFM	< 85 CFM (2.4 m³/min)	< 74 CFM (2.1 m³/min)

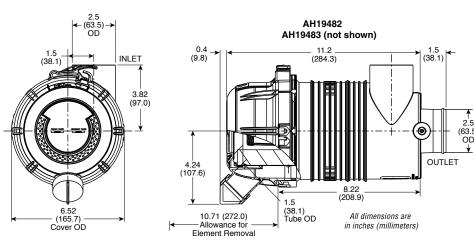


Air Cleaners		
Part Number	Description	
AH19483	OptiAir™ 500 Series Air Cleaner – without Secondary Element – with Straight Outlet	
AH19482	OptiAir 500 Series Air Cleaner – with Secondary Element – with Straight Outlet	

Accessories		
Part Number	Description	
3918198 S	Mounting Bracket	
1	No. of Brackets Required	
3316654 S	Outlet Band Clamps	
3918193 S	Weather Hood	
N/A	Hump-Hose	
3316565 S	90° Elbow	
N/A	90° Reducing Elbow	
3946326 S	Restriction Indicator	

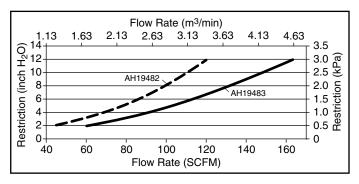
Service Parts		
Part Number Description		
AF26168	Primary Element	
N/A	Magnum Primary Element	
AF26351	Secondary Element	
3946457 S	Dust Ejection Valve	
3946460 S	Cover Assembly	

# **Dimensions**

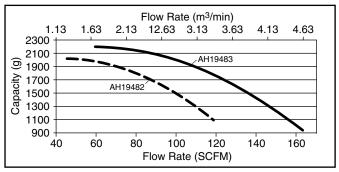


### **Performance**

### System Restriction vs Flow Rate



## Typical System Capacity vs Flow Rate

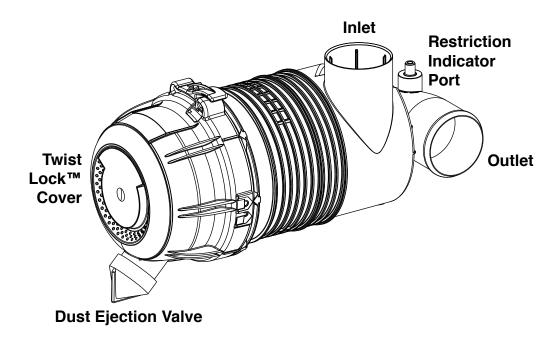


Restriction		Flow Rate ( ) = with Secondary		Typical Capacity ( ) = with Secondary
in H <sub>2</sub> O	kPa	CFM	m³/min	grams
6	1.5	112 (87)	3.17 (2.46)	1845 (1700)
8	2.0	132 (100)	3.74 (2.83)	1585 (1465)
10	2.5	147 (111)	4.16 (3.14)	1300 (1285)
12	3.0	163 (120)	4.62 (3.40)	930 (1050)

ISO Coarse Dust 2.0 g/m³ Feed Rate 6.25 kPa (25" H<sub>2</sub>0) Terminal Restriction



# OptiAir.



# **Specifications**

Specification	AH19487	AH19486
Length Overall	14.5" (368.3 mm)	14.5" (368.3 mm)
Cover OD	6.5" (166.0 mm)	6.5" (166.0 mm)
Flow, Min. (2" restriction)	70 CFM (2.0 m³/min)	40 CFM (1.1 m³/min)
Flow, Max. (12" restriction)	145 CFM (4.1 m³/min)	110 CFM (3.1 m <sup>3</sup> /min)
Secondary Element	No	Yes
Housing Material	Glass-Filled Polypropylene	Glass-Filled Polypropylene
Pre-cleaner Integral	Yes	Yes
Outlet	90° Elbow	90° Elbow

# **Dust Holding Capacity per Cummins® Specification**

Specification	AH19487	AH19486
Allowable Flow for 10 g/CFM	< 127 CFM (3.6 m³/min)	< 105 CFM (3.0 m³/min)
Allowable Flow for 25 g/CFM	< 85 CFM (2.4 m³/min)	< 79 CFM (2.2 m³/min)

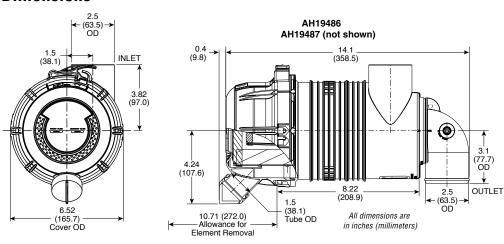


Air Cleaners		
Part Description		
AH19487	OptiAir™ 500 Series Air Cleaner – without Secondary Element – with 90° Outlet	
AH19486	OptiAir 500 Series Air Cleaner – with Secondary Element – with 90° Outlet	

Accessories			
Part Number Description			
3918198 S	Mounting Bracket		
1	No. of Brackets Required		
3316654 S	Outlet Band Clamps		
3918193 S	Weather Hood		
N/A	Hump-Hose		
3316565 S	90° Elbow		
N/A	90° Reducing Elbow		
3946326 S	Restriction Indicator		

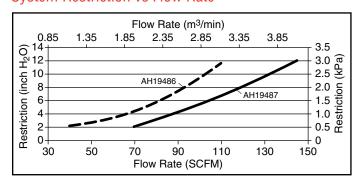
Service Parts		
Part Number Description		
AF26168	Primary Element	
N/A	Magnum Primary Element	
AF26351	Secondary Element	
3946457 S	Dust Ejection Valve	
3946460 S	Cover Assembly	

# **Dimensions**

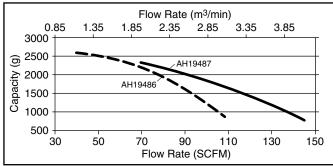


### **Performance**

## System Restriction vs Flow Rate



# Typical System Capacity vs Flow Rate

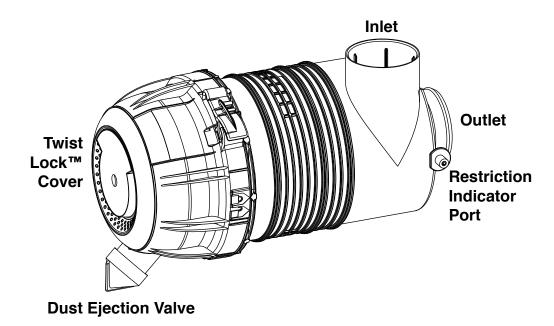


Restriction		Flow Rate ( ) = with Secondary		Typical Capacity ( ) = with Secondary
in H <sub>2</sub> O	kPa	CFM	m³/min	grams
6	1.5	105 (81)	2.97 (2.29)	1747 (1880)
8	2.0	119 (96)	3.37 (2.72)	1470 (1420)
10	2.5	134 (105)	3.79 (2.97)	1130 (1040)
12	3.0	145 (110)	4.11 (3.11)	750 (800)

ISO Coarse Dust 2.0 g/m³ Feed Rate 6.25 kPa (25" H<sub>2</sub>0) Terminal Restriction



# OptiAir.



# **Specifications**

Specification	AH19476	AH19477
Length Overall	14.8" (375.1 mm)	14.8" (375.1 mm)
Cover OD	7.6" (193.7 mm)	7.6" (193.7 mm)
Flow, Min. (2" restriction)	98 CFM (2.8 m³/min)	80 CFM (2.3 m³/min)
Flow, Max. (12" Restriction)	240 CFM (6.8 m³/min)	206 CFM (5.8 m³/min)
Secondary Element	No	Yes
Housing Material	Glass-Filled Polypropylene	Glass-Filled Polypropylene
Pre-cleaner Integral	Yes	Yes
Outlet	Straight	Straight

# **Dust Holding Capacity per Cummins® Specification**

Specification	AH19476	AH19477
Allowable Flow for 10 g/CFM	< 212 CFM (6.0 m³/min)	< 191 CFM (5.4 m³/min)
Allowable Flow for 25 g/CFM	< 135 CFM (3.8 m³/min)	< 126 CFM (3.6 m³/min)

