Donaldson
FILTRATION SOLUTIONS

Engine Service Parts and Accessories Guide

Clean.Protect.
Perform.

Pre-Cleaners

TopSpin™ Pre-Cleaner

Can Maximize Your Intake System Extends Filter Life in Extremely Heavy Dust Conditions

Donaldson TopSpin™ will extend main element life, boost system efficiency and extend engine life!

The aerodynamically designed TopSpin™ is made of a lightweight, durable, non-corroding material which makes it tolerant to all weather and operating conditions.

Features

Separates up to 85% of incoming contaminant per ISO 5011/SAE J726

- Greatly extends air filter life.
- Reduces air filter usage.
- Lowers cost per operating hour.
- Automatically ejects mixed debris.
- Separates more than 99% of 20 micron and above particles.

Operates at a lower RPM

- Less noise.
- Longer bearing life.
- Lower restriction.

Self-cleaning/self-scavenging

- No maintenance to clean bowl.
- No exhaust ejector required.

Easy installation

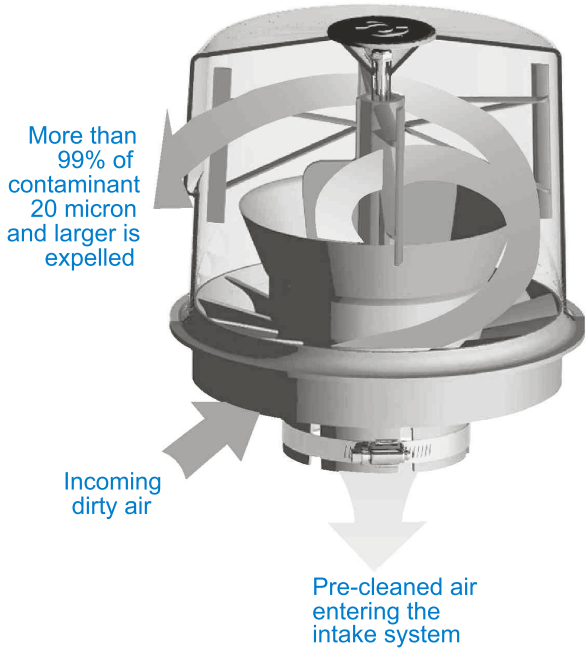
- Quick installation.
- One clamp to tighten.
- No wires or power requirements.

Dual mounted bearings

- More robust design.
- Extends bearing life.

Lighter Weight

- Lighter than competitive pre-cleaners.
- Lighter than Donaldson full-view pre-cleaner.



Application

- For engine airflows of 2.2 to 42.5 m^3/min.
- Primarily used in medium- to heavy-dust environments.
- Great for off-road vehicles & equipment from crawler. tractors to farm tractors to skid steer loaders.
- Recommended mounting: on top of the engine intake stack.

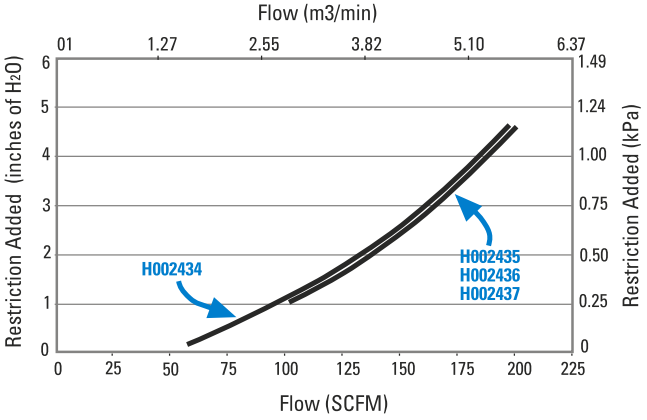
- Donaldson TopSpin™ can be mounted horizontally or vertically.
- Installation instructions, stainless clamp and warranty are included.
- Operating temperature range: -40°C to 82°C.

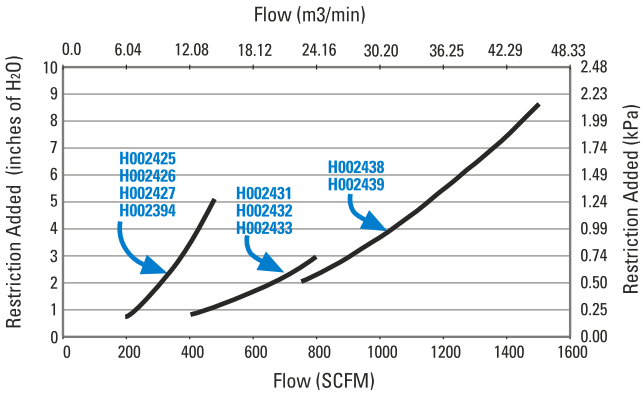
Pre-Cleaners

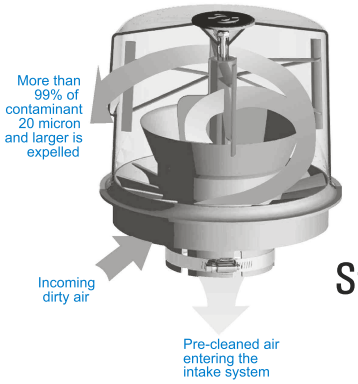
TopSpin™ Pre-Cleaner

Performance Curves

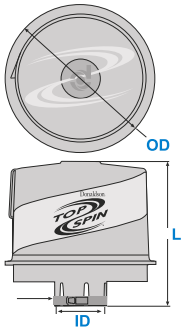
Test conducted per ISO 5011/SAE J726. Performance test results are an average from testing several units.







Stainless Clamp

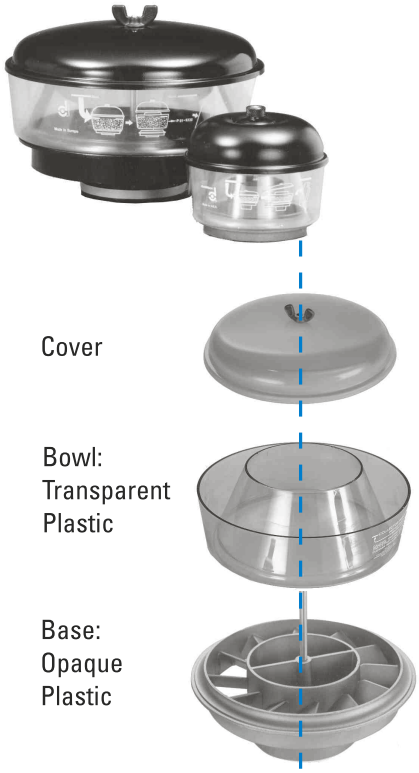


Part Number	Flow rate	Outlet Inner Diameter (ID)	Overall Height (L)	Body Diameter (OD)
	m³/min	mm	mm	mm
PTH002434	2.5 - 5.7	52	146	162
PTH002435	2.5 - 5.7	58	146	162
PTH002436	2.5 - 5.7	64	146	162
PTH002437	2.5 - 5.7	77	146	162
PTH002425	5.7 - 12.7	78	238	242
PTH002426	5.7 - 12.7	97	238	242
PTH002394	5.7 - 12.7	103	238	242
PTH002431	12.7 - 21.2	103	287	288
PTH002427	5.7 -12.7	116	238	242
PTH002432	12.7 - 21.3	116	287	288
PTH002433	12.7 - 21.4	128	287	288
PTH002438	21.2 - 42.5	153	345	397
PTH002439	21.2 - 42.6	179	345	397

Pre-Cleaners

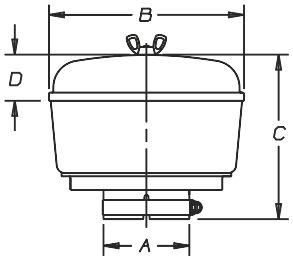
Full-View Pre-Cleaner

Extends Filter Life on Agricultural & Construction Equipment



Features

- Recommended mounting: On top of the engine intake stack.
- Centrifugal force in bowl separates up to 75% of incoming dust before it enters the engine air intake system.
- Low maintenance!
- Durable, lightweight, noncorrosive construction.
- Full-View plastic bowl lets operator easily see when service is needed.
- One-bolt cover retention for service when dirt reaches the level of the arrow, remove top nut and plastic body then empty – no tools required.
- Mounting clamp included.

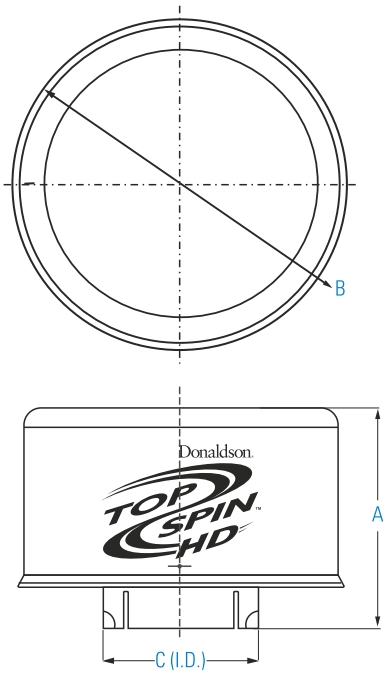


Pre-cleaner Model	Fits Tube O.D mm	Recommended Air Flow m^3/min	Bowl	Glass Bowl O.D. mm
PBH002042	44	1.5 – 2.2	P020115	142
PBH001823	51	2.1 – 5.6	P020227	186
PBH001250	57	2.1 – 5.6	P020227	186
PBH001251	64	2.1 – 5.6	P020227	186
PBH001249	76	2.1 – 5.6	P020227	186
PBH000820	76	6.0 – 14.5	P016330	186
PBH000821	95	5.6 – 13.5	P016330	270
PBH000858	102	5.0 – 11.5	P016330	270
PBH000823	114	8.5 – 22.6	P016330	270
PBH002043	127	8.5 – 22.6	P020334	306
PBH002223	152	11.4 – 31.0	P158324	413
PBH002224	178	12.0 – 48.0	P158324	413

Pre-Cleaners

TopSpin HD

Tough, durable solution for the punishing conditions that can damage exposed equipment



Features

- Separate and eject up to 80% of incoming contaminants
- Long filter life, less frequent replacement
- Lower operating cost
- Less maintenance

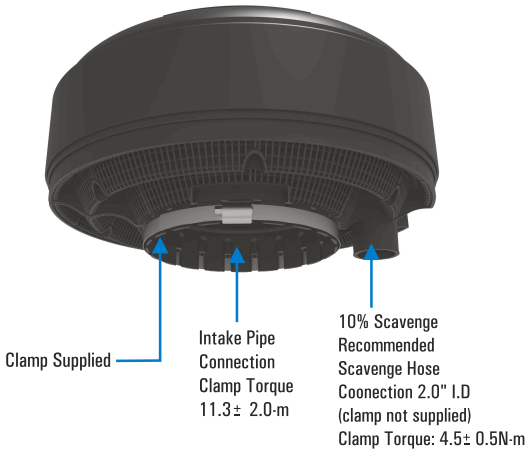
Part Number	Operating Flow Range	Outlet Diameter (ID)	Body Diameter (B)	Overall Height (A)
	m³/min	mm	mm	mm
PTH002850	1.4 - 2.8	52	137	87
PTH002851	2.8 - 5.6	66	160	108
PTH002852	4.2 - 7.8	78	183	126
PTH002853	5.6 - 11.3	104	222	148
PTH002854	10.0 – 20.0	129	284	192
PTH002855	14.0 – 27.0	155	325	196
PTH002856	21.0 – 38.0	180	375	213
PTH002857	26.6 - 44.8	205	375	213

Pre-Cleaners

Strata Cap

A combination of both pre-cleaner and rain cap (All in one).

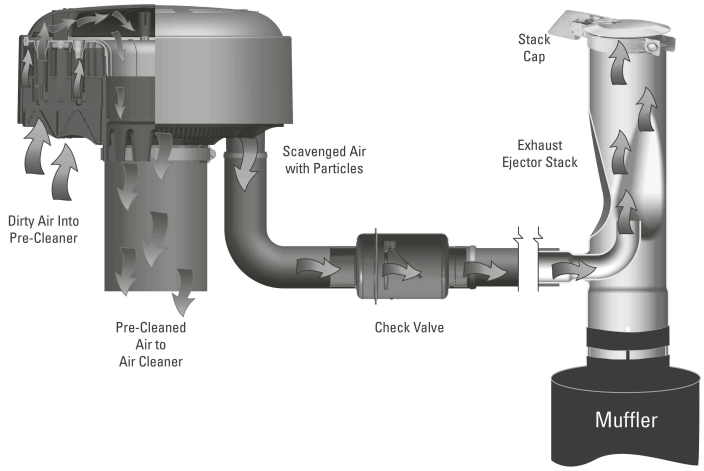
Strata caps are designed to withstand the most demanding heavy dust environments.



Features

- Highest efficiency compared to all
- Donaldson pre-cleaners
- Separates 99% of 20 micron and abovesized particles
- Scavenge connection

How the Strata™ System Works

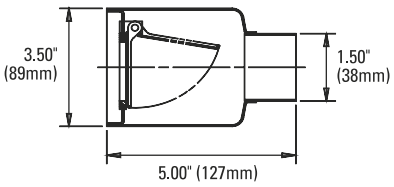


Part No.	Rated Air Flow (m^3/min)	Outlet I.D (mm)	Scavenge Hose I.D (mm)	Body Diameter (mm)	Height (mm)
H002700	17.0	127	51	356	218
H002704	32.3	203	51	437	218

Check Valves

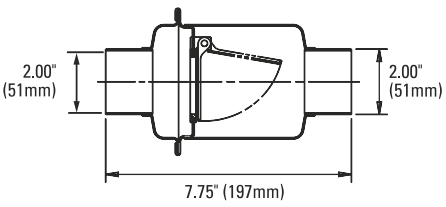
Ejector Check Valves

Constructed to prevent the exhaust gases backflow



Features

- Mounts horizontally only
- Durable, non-corrosive metal construction
- No service required



Exhaust Ejectors

Connects to the Pre-cleaner

A scavenge hose connects the pre-cleaner to the exhaust ejector which automatically ejects collected contaminants through the exhaust system.

Features

- Can be used with any pre-cleaner that has scavenge tube connection
- Adds only 1kPa (4" H2O) to 2kPa (8" H2O) to exhaust back pressure.

Diesel engine power range				
Ejector model no.	**Scavenge tube O.D (mm)**	**Ejector O.D (mm)**	**Ejector Length (mm)**	**Engine intake airflow range m³/min**
EEH001283	32	66	226	3.2 – 4.5
EEH002768 Replace H002132	51	152	700	26.9 – 33.5
EEH001280	32	92.1	318	5.8 – 9.5

Pre-Cleaner

Donaspin

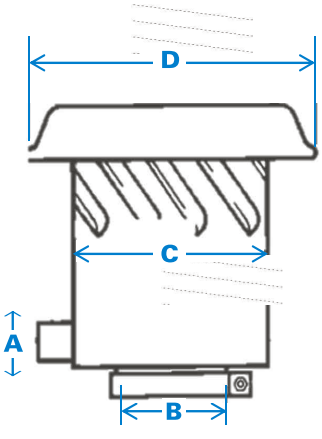
With Scavenge line connection




Features

- Removes up to 90% of dirt and contaminant before reaching the filter and eject automatically via the exhaust
- High efficiency with less restriction
- Self-cleaning, no maintenance
- No moving parts
- Durable, corrosion-resistant steel construction

Part Number	Rated Air Flow@5" H_2O Added	A (OD)	B (ID)	C (OD)0	D
	m³/min	mm	mm	mm	mm
PLH001212	9	32	76	203	305
PLH001215	13	32	114	203	305
PLH001308	15	32	127	203	305
PLH001375	22	32	152	229	330



Hoods

Inlet Hood

Protects against rain and debris ingestion

Features

- Protects the engine from rain, birds and other large contaminants
- Mounts on stack or directly to air cleaner for on-road and off-road equipment

Part No.	Fits tube OD mm
GAX002017	45 – Metal
GAX002018	51 – Metal
GAH000161	76 – Metal
GAX001988	95 – Metal
GAH000258	102 – Metal
GAH000241	114 – Metal
GAH000165	127 – Metal
GAH000276	152 – Metal
GAH000178	178 – Metal

Part No.	Fits tube OD mm
GAH001378	64 – Plastic
GSH001379	76 – Plastic
GAH000472	102 – Plastic
GAH000469	127 – Plastic

Inlet Ram Hood

Designed to improve the engine performance by improving the intake system airflow

Features

- Separates moisture and eliminate water
- Extend filter element life
- Improves fuel economy
- Prevents large debris from entering the intake duct
- Light weight
- No service needed

Part Number	Fits tube OD mm
GSH008149	80
GSH008154	102
GSH008150	128.5
GSH001660	154
GSH001654	179

DuraLite™ Air Cleaner

ECB

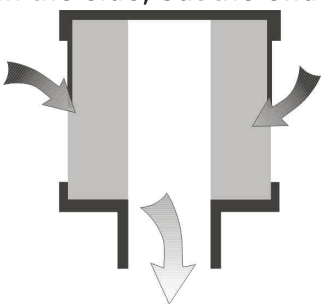
Non-metallic, so they're lightweight, self-supporting, and completely disposable

Features

- Can be mounted horizontally or vertically
- No serviceable parts
- Available in 3 air flow styles, B, C and D
- Various media available for specific applications: High pulsation and high humidity
- Can be used on various applications including stationary engines – compressors, welding machines etc.

Airflow Pattern "B"

Air in the side, out the end

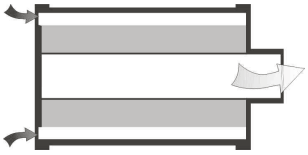


Part No.	Max Air Flow (m/min)	Outlet I.D (mm)
B085048	11.0	76
B085011	13.3	102
B125011	29.0	127
B085056	40.0	152
B120376	60.0	203
B120472	74.9	198

ECC

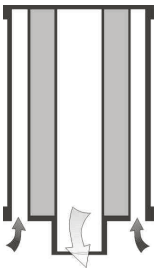
Airflow Pattern "D"

Air in the end, out the opposite end



Airflow Pattern "C"

Air in the end, out the same end



Part No	Max Flow (m^3/min)	Outlet Size (mm)
C035003	0.8	25
C045001	1.8	38
C045002	2.3	38
C055002	3.0	44
C055003	2.7	44
C065001	4.0	51
C065002	4.6	51
C065003	5.0	57

Part No	Max Flow (m^3/min)	Outlet Size (mm)
C065015	5.4	61
C085001	4.8	64
C085002	5.5	64
C085004	8.8	76
C105003	13.6	102
C105004	14.8	102
C125004	21.5	127

Air Cleaners
FPG RadialSeal™

The FPG RadialSeal™ Air Cleaner is a two-stage full-plastic air cleaner with a built-in Pre-Cleaner and RadialSeal™ Sealing Technology.

Product Description:

Applications

- Provides up to 18m3/min. airflow per air cleaner – double throughput by using two units.
- Installation can be horizontal, vertical, or even at an angle (as long as Vacuator ™ Valve points down).
- 4", 5", 7", 8" and 10" diameter sizes.
- Temperature tolerance: 83°C sustained.

Air Cleaner Features

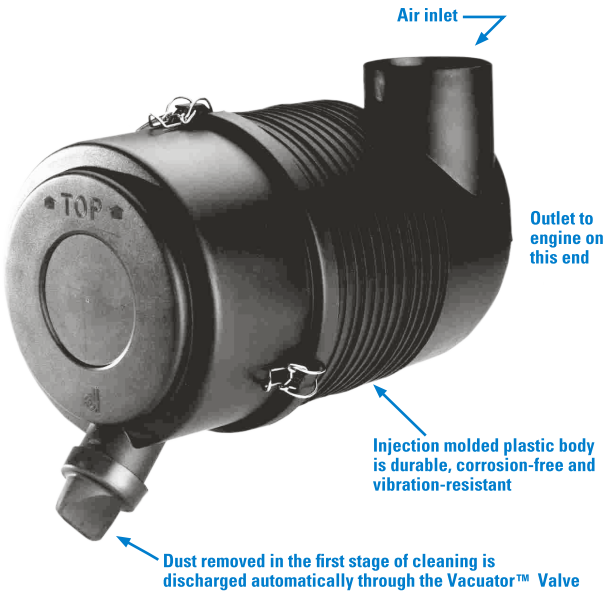
- Easy to service! No tools needed!
- Usually done in 5 minutes or less!
- Durable plastic housing - corrosion-free and lightweight.
- Two-stage air filtration! Built-in, tangential pre-cleaner ahead of main element removes up to 85% of incoming dust.
- Easy to fasten latches (no bolts!) retain dust cup/cover.
- 45° Vacuator™ Valve orientation permits either vertical or horizontal air cleaner mounting (the dust cup can be incrementally rotated to suit specific application). Safety element protects engine during in-field filter change outs.
- Already tapped to accept filter service indicator.

Filter Features

- RadialSeal™ Sealing Technology means reliability and easy service – the filter is self-centering and self-aligning!
- One piece, molded urethane endcaps encase the filter media and liners – reducing components, adding reliability and lowering cost.

*Note: Mounting bands not included with assemblies (excluding FPG10)

FPG Structure



FPG RadialSeal™ Service Parts

Part Number	Primary Element	Safety Element	Access Cover	Vacuator Valve	Mounting Band - Steel	Mounting Band - Plastic
FPG042544	P822686	P535396	P777153	P522958	H008442	-
FPG042545*	P822686	P535396	P777153	P522958	H008442	-
FPG057502	P772578	P775298	P775308	P522958	H770031	P777730
FPG057514*	P821575	P822858	P533761	P522958	-	P777730
FPG065411*	P822768	P822769	P539422	P158914	H008444	-
FPG065424	P822768	P822769	P539422	P158914	H008444	-
FPG065432	P822768	P822769	P539422	P158914	H008444	-
FPG070006	P772579	P775300	P775311	P522958	H002070	-
FPG082503	P772580	P775302	P775305	P775569	-	P777732
FPG082526*	P772580	P775302	P534048	P158914	-	P777732
FPG100274	P777588	-	P777589	P158914	Forms part of the air cleaner	

FPG RadialSeal™ Specification

Part Number	Air Flow m³/min	Body Diameter (mm)	Body Length (mm)	Inlet Diameter (mm)	Outlet Diameter (mm)
FPG042544	1.6 – 2.0	122	189	44	44
FPG042545*	1.6 – 2.0	122	189	44	44
FPG057502	1.0 – 2.8	146	300	51	51
FPG057514*	2.3 – 3.0	146	278	51	51
FPG065411*	3.1 – 4.1	171	320	64	64
FPG065424	3.1 – 4.1	171	320	64	64
FPG065432	3.4 – 4.4	171	320	64	64
FPG070006	2.0 – 4.70	182	330	76	76
FPG082503	4.0 – 8.0	212	355	95	89
FPG082526*	4.7 – 6.1	212	361.4	95	89
FPG100274	9.0 – 16.0	262	385.3	190	127

FPG08 RadialSeal™

For optimum performance on wide range of light and medium duty vehicles and equipment.

Part No	Max Air Flow@200mm H_2O Restriction	Description
KYX006825	8 m^3/min	Toggle latches at outlet
KYX006826		Toggle latches at Dust Bowl

Service Parts

Part No	Description
P921498	Cover Outlet
P921496	Cover Dust Bowl
P921505	Filter Element (Standard)
P922505	Filter Element (Extended life)
P921619	Mounting Band
P775043	Latch

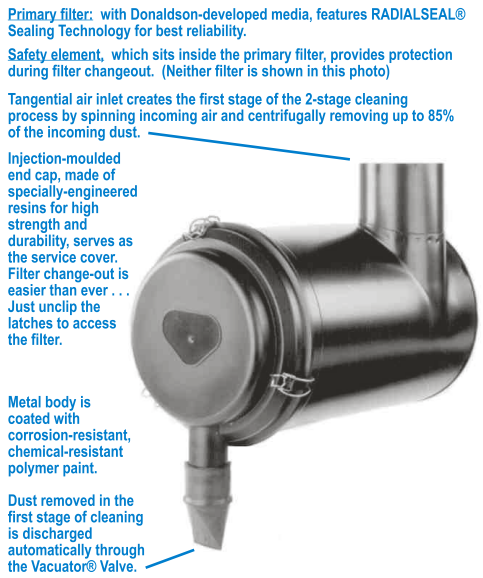
Air Cleaners

FRG RadialSeal™ for Medium - Heavy Dust Conditions

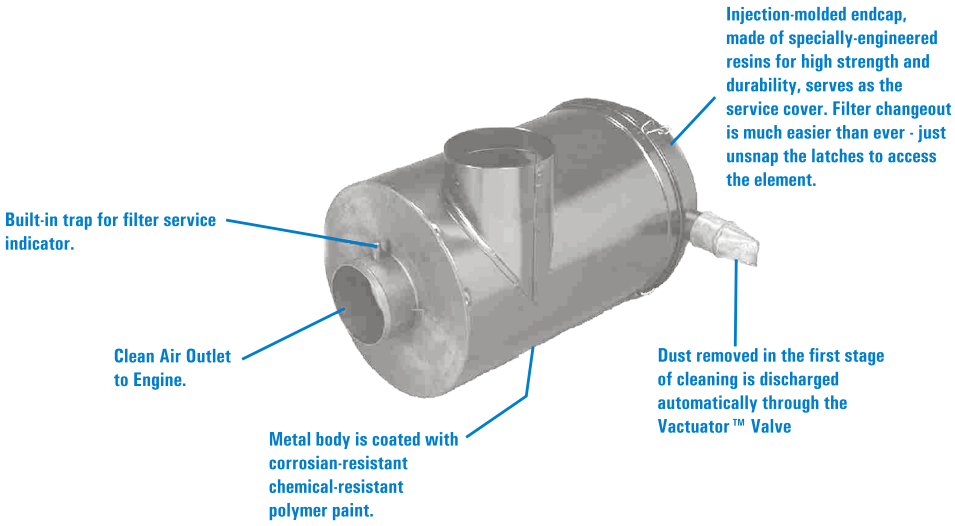
The FRG RadialSeal™ Air Cleaner is a two-stage hybrid air cleaner with RadialSeal™ Sealing Technology. FRG RadialSeal™ Air Cleaners are used on medium - and heavy-duty applications.

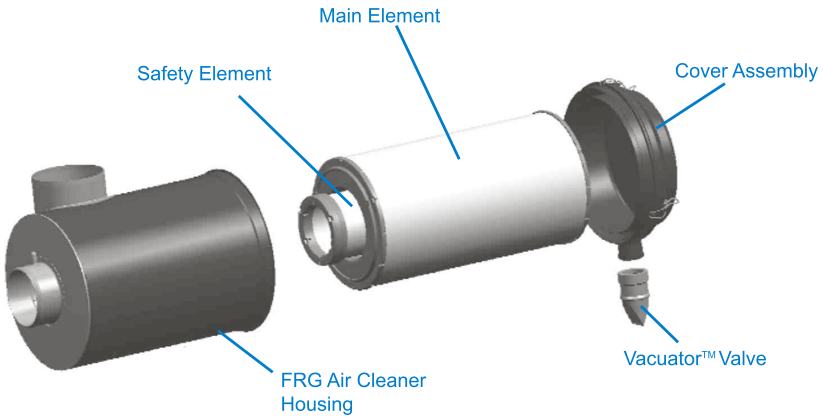
Product Description:

- Light weight
- Compact
- Flexible installation
- Two-stage air cleaner: 1st stage is a tangential air inlet removing 85% of incoming dust
- High tech design
- Proven RadialSeal™ technology
- Restriction indicator tapping point as standard
- Easy to service
- Suitable for medium-to heavy-dust conditions



FRG Stucture





FRG RadialSeal™ Specification

Part No	Air Flow m³/min	Body Diameter	Body Length	Inlet Outer Diameter	Outlet Outer Diameter
FRG100331	8 – 10	259	430	114	102
FRG110241	11 – 15	279	490	127	114
FRG130061	14 – 19	330	530	152	127
FRG130107	12 - 16	330	425	152	127
FRG150120	20 – 27	381	530	178	152
FRG180033	23 – 37	457	510	203	178
FRG180036	27 – 40	457	644	178	178
FRG180073*	34 – 45	457	650	203	203
FRG180075*	26 - 42	457	650	203	203

FRG RadialSeal™ Service Parts

Part No	Primary Element	Safety Element	Access Cover	Vacuator Valve	Mounting Bands
FRG100331	P777638	P777639	P777455	P158914	P004076
FRG110241	P532966	P533781	P538452	P158914	P004079
FRG130061	P777409	P777414	P777408	P776008	P013722
FRG130107	P532503	P532504	P547193	P776008	P013722
FRG150120	P777868	P777869	P777920	P776008	P922850
FRG180033	P781398	P781399	P783185	P103198	P922534
FRG180036	P781098	P922483	P922482	P103198	P922534
FRG180073	P785394	P785395	P784792	P103198	P922534
FRG180075	P785394	P785395	P784792	P103198	P922534

FHG Cyclopac for Medium - Heavy Dust Conditions

Durable, vibration resistant two-stage air cleaner for medium- and heavy-duty applications.

Product Description:

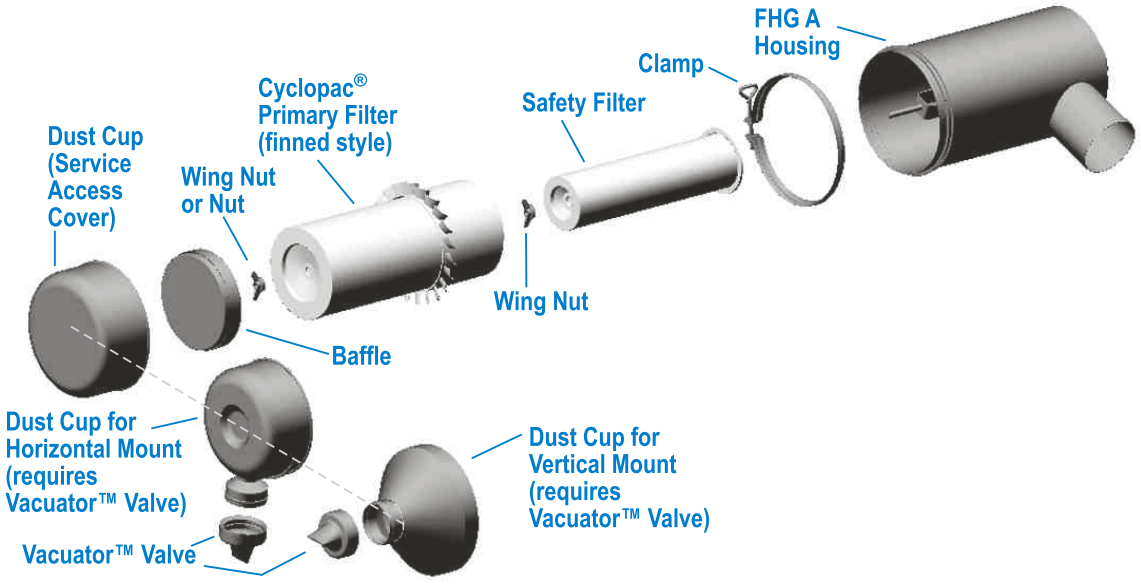
Ideal for:

- Construction equipment
- Agricultural machinery
- Mining equipment
- Off-highway vehicles

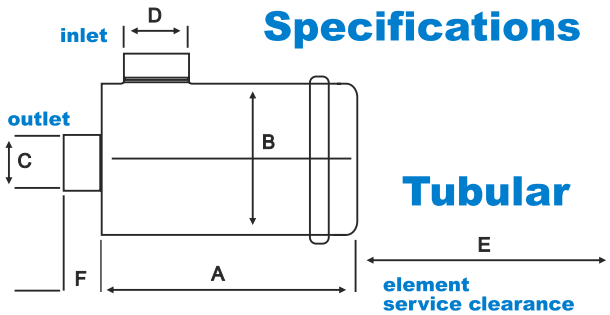
Air Cleaner Features

- Two-stage air cleaner: 1st stage removing 85% of incoming dust
- First stage uses angled vanes on the primary
- Vacuator™ Valve automatically releases the pre-cleaned dust
- Already tapped to accept filter service indicator

FHG Service Parts: Style A with Dust Cup



Specifications



Tubular

FHG HOUSING PART NUMBER	DESCRIPTION	A	B	C	D	E	F	Initial Airflow restriction		
								150 mm	200 mm	250 mm
FHG065101	Long 6" cleaner fitted with a safety element	460	167	76	76	310	51	4.6	5.5	6.4
FHG065184	Short 6" cleaner (no safety element)	360	167	57	76	230	48	3.8	4.3	4.7
FHG065189	FHG06-5184 fitted with a safety element	360	167	57	76	230	48	3.8	4.3	4.7
FHG065201	Shortest 6" cleaner (no safety element)	310	167	57	64	200	48	2.1	2.4	2.8
FHG080200	FHG08-0200 Long 8" cleaner fitted with safety element	460	203	89	95	300	54	6.0	7.0	7.9
FHG080265	FHG08-0267 fitted with safety element	360	203	89	95	230	54	5.2	6.0	6.6
FHG080267	Short 8" cleaner (no safety element)	360	203	89	95	230	54	5.2	6.0	6.6
FHG080332	FHG08-0265 fitted with horizontal vacuator sleeve	360	203	89	95	230	54	5.2	6.0	6.6
FHG090022	Basic 9" air cleaner (with safety element)	485	229	102	114	330	54	8.1	10.3	11.5
FHG090077	FHG09-0022 with reduced inlet	485	229	102	102	330	54	8.1	10.3	11.5
FHG090090	FHG09-0022 fitted with horizontal vacuator sleeve	485	229	102	114	330	54	8.1	10.3	11.5
FHG120014	Basic 12" air cleaner (with safety element)	460	301	127	127	256	51	9.4	10.8	13.1
FHG120036	FHG12-0014 fitted with horizontal vacuator sleeve	459	300	127	127	256	51	9.4	10.8	13.1
FHG140022	Basic 14" cleaner (with safety element)	535	356	152	152	332	57	15.8	18.5	21.0
FHG140054	FHG14-0022 fitted with a horizontal vacuator sleeve	535	356	152	152	332	57	15.8	18.5	21.0
FHG160048	Basic 16" cleaner (with safety element)	585	406	178	178	383	59	21	24.5	27.5
FHG160078	FHG16-0048 fitted with horizontal vacuator sleeve	585	406	178	178	383	59	21	24.5	27.5

FHG Cyclopac® Air Cleaner Service Parts

FHG Housing	Primary Element	Safety Element	Clamp Assy	Nut Assy	Baffle Assy	Cup Assy	O-rings
FHG065101	P119135	P114500	P002940	P101870	P102510	P102805	-
FHG065184	SMP181052	-	P002940	P101870	P102510	P102805	-
FHG065189	SMP181052	P123160	P002940	P101870	P102510	P102805	-
FHG065201	P131567	-	P002940	P101870	P102510	P102805	-
FHG080200	SMP181059	P119410	P003951	P101870	P102980	P103113	-
FHG080265	SMP181093	P124767	P003951	P101870	P102980	P103113	-
FHG080267	SMP181093	-	P003951	P101870	P102980	P103113	-
FHG080332	SMP181093	P124767	P003951	P101870	P102980	P103837	-
FHG090022	SMP181063	P119778	P102025	P101870	P105050	P112667	-
FHG090077	SMP181063	P119778	P102025	P101870	P105050	P112667	-
FHG090090	SMP181063	P119778	P102025	P101870	P105050	P138514	-
FHG120014	SMP181034	P119374	P100808	P101870	P106329	P106589	P017804
FHG120036	SMP181034	P119374	P100808	P111852	P106329	P109296	P017804
FHG140022	SMP181046	P119373	P100866	P111852	P106771	P106773	P017335
FHG140054	SMP181046	P119373	P100866	P111852	P106771	P109297	P017335
FHG160048	SMP181002	P119372	P100789	P111852	P106637	P106639	P017336
FHG160078	SMP181002	P119372	P100789	P111852	P106637	P106952	P017336

Air Cleaners

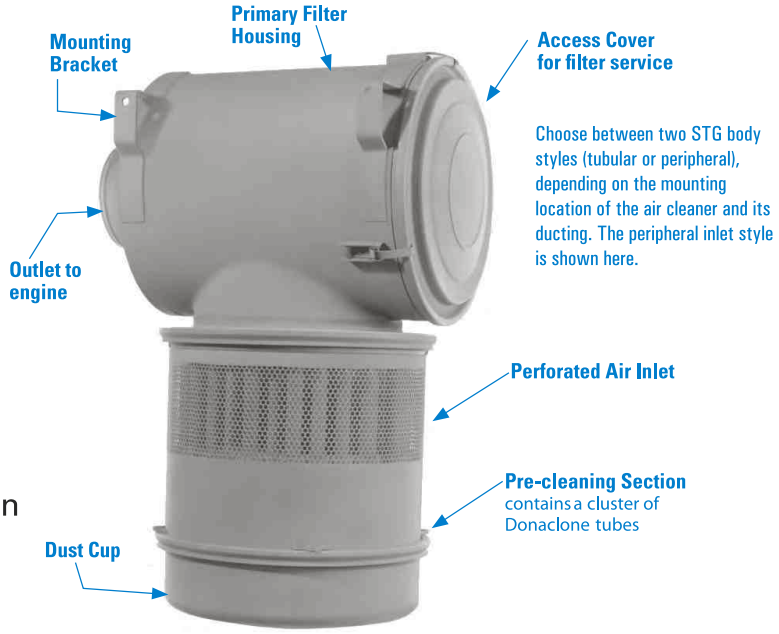
STG Donaclone®

Powerful Two-stage Filtration – Choose Peripheral or Tubular Inlet: Horizontal or Vertical Mount

Product Description:

Applications

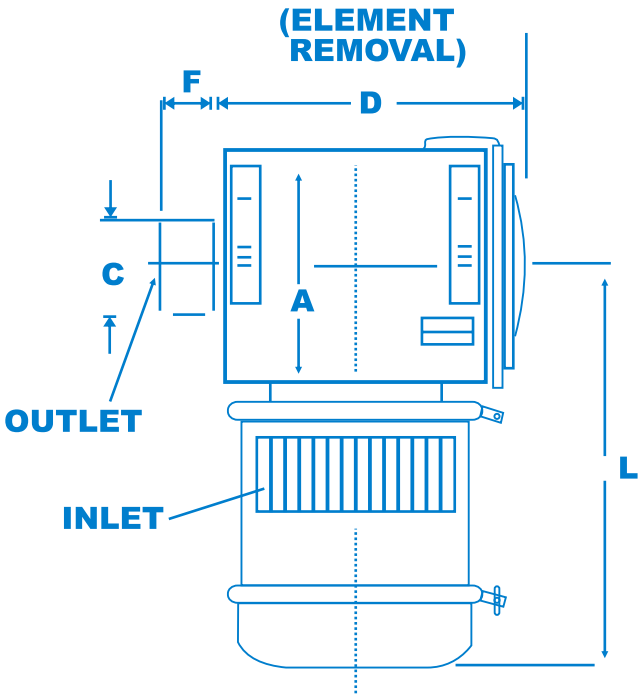
- Allows 11 to 50 m^3/min airflow throughput per air cleaner
- Horizontal or vertical installation
- Off-road, high dust conditions
- Ideal for scrapers, earth movers, graders.



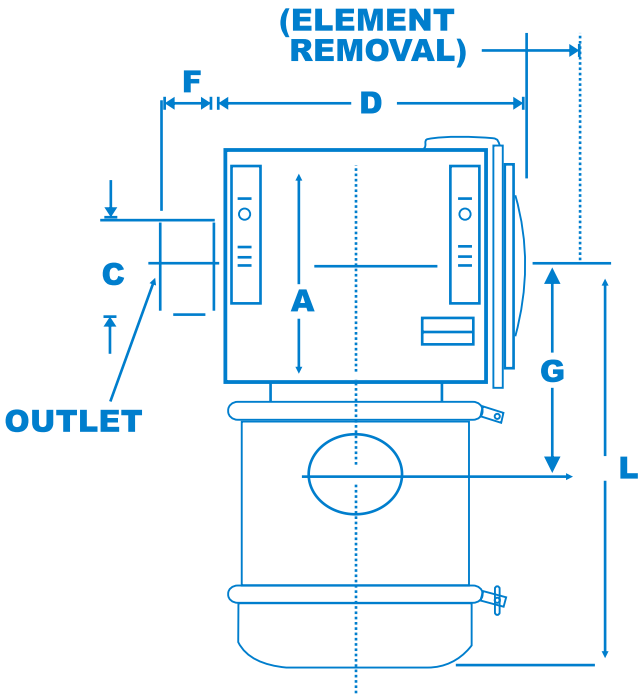
Air Cleaner Features

- Airflow throughput can be doubled by using two air cleaners
- Two body styles, peripheral inlet shown on right and tubular inlet to accommodate location and ducting
- Built-in Donaclone pre-cleaning tubes separate up to 95% of incoming dust to dust cup before it reaches the filter, resulting in more thorough cleaning and fewer filter changes!

Peripheral Design



Tubular Design



STG Donaclone® Specification

Part Number	Air Flow range, Initial res. m³/min		
	150 mm	200 mm	250 mm
STG- Peripheral			
STG140076	20.1	23.8	27.0
STG160077	28.7	33.3	37.4
STG161006	38.5	44.4	49.8
STG- Tubular			
STG120332	11.0	13.0	15.0
STG160445	25.9	30.1	34.0
STG161020	31.9	37.0	41.5

STG Donaclone® Service Parts

Part No	Primary Element	Safety Element	Body Assembly		Body clamp	Body O ring x2	Dust cup	Dust cup clamp	Element cover	Cover gasket
			Upper Body	Lower Body						
STG– Peripheral										
STG140076	P182041	P119370	-	-	P100861	P017335	P100860	P100866	P109084	P016972
STG160077	P182039	P114931	P109125	P148397	P100780	P017336	P100794	P100789	P109153	P017367
STG161006	P182042	P128408	P137475	P148397	P100780	P017336	100794	P100789	P128593	P017367
STG– Tubular										
STG120332	P182044	P119371	P109212	-	P100895	P017804	P100807	P100808	P109194	P017365
STG160445	P182039	P114931	P109125	-	P100780	P017336	P100794	P100789	P109153	P017367
STG161020	P182042	P128408	-	P104498	-	P017336	P100794	P100789	-	P017367

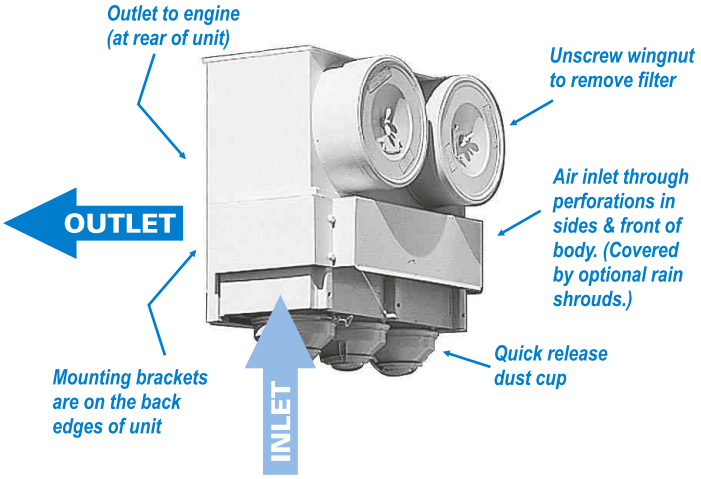
SRG Donaclone™ Service Parts

High Horsepower Application

Product Description:

Applications

- Allows 48 to 115 m^3/min airflow use two air cleaners to double airflow throughput
- Designed for large, high horsepower, off-road equipment
- For large engines operating in severe dust environments

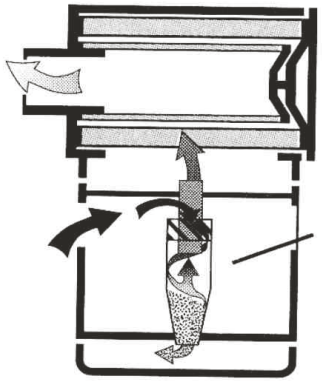


Air Cleaner Features

- Single outlet: SRG20 (1 filter)
- Dual outlet: SRG29 (2 filters)
- Built-in Donaclone pre-cleaning tubes separate up to 97% of incoming dust to dust cup before it reaches the filter
- Vertical mounting

SRG Donaclone® Specification

Part Number	Air Flow range, Initial res. m^3/min	
	150 mm	200 mm
SRG200008	48	56
SRG200013	50	58
SRG290023	95	108



Pre-Cleaner Section with Donaclone Tubes

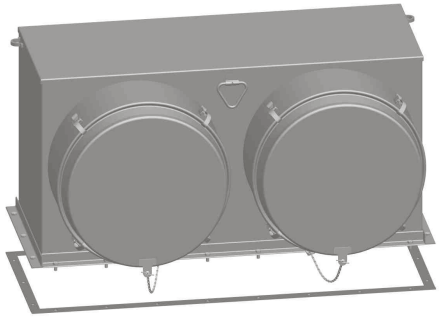
SRG Donaclone™ Service Parts

Air Cleaner	SRG20-0008	SRG20-0013	SRG29-0023
Upper Body (No elements)	P124892	P124893	P115107
Lower body	P117785	P117785	P118552
Primary Element	P140236	P117782	P140236
Safety Element	P115070	P117781	P115070
Wing Nut Gasket Washer	P105740	P105740	P105740
Clip – Wing Nut	P105738	P105738	P105738
Primary Wing Nut	P116175	P116175	P116175
Boot Gasket (Element)	P115097	P115097	P115097
Dust Bowl "O" Ring	P017804	P017804	P017804
Clamp Assy	P100808	P100808	P100808
Dust Cup (Quick Release)	P107375	P107375	P107375
Dust Bowl Gasket	P112789	P112789	P112789
Rest. Cap	P100091	P100091	P100091
Body Gasket	2x P117791	2x P117791	2x P115096
Body Gasket	2x P115098	2x P115098	2x P115098
Bolt	P107915	P107915	P107915
Nut	P115063	P115063	P115063
Flange Assy (O/let)	P119971	P117762	P119971
Pin	P109107	P109107	P109107
Safety Nut	P109063	P109063	P109063

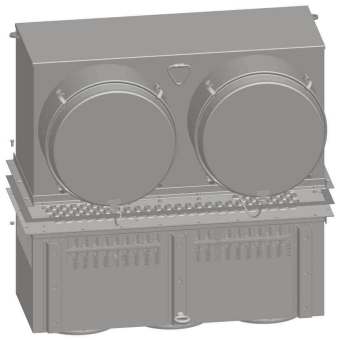
Convert SRG Housing to new SSG Housing Style!

Replacing an older SRG housing with the new SSG housing allows you to simplify your routine filter service – no more separate gaskets at each filter change or removing a bolted on cover. SSG filters have RadialSeal™ end caps that provide a more reliable, consistent seal. Choose from an upper assembly conversion kit or you may want to install a complete new housing if your current SRG assembly needs repair or is reaching the end of its useful life.

SRG29 Housing



Upper Body Conversion Kit



SSG29 Housing

SRG Housing Item No.	SRG to SSG Kit* Kit No.	SSG Assy.		
		SSG Housing	Primary Element	Safety Element
G200008	X009702	G200087	P608306	P608305
G200013	X009701	G200086	P608306	P608305
G290000	X009230	G290057	P608306	P608305
G290023	X009230	G290052	P608306	P608305
G290012	X009231	G290053	P608306	P608305

** The finish on the replacement kit upper assembly is a white, powdered-coated paint. Installation instructions are included with the kit.*

Note: Items currently available on request

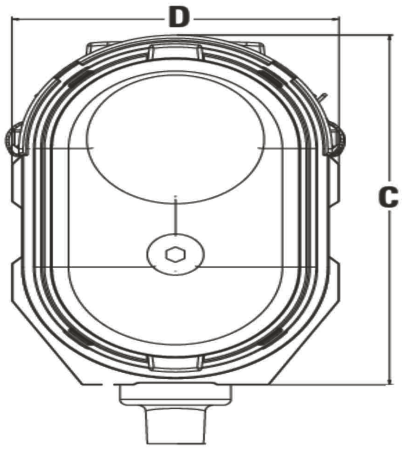
Air Cleaners

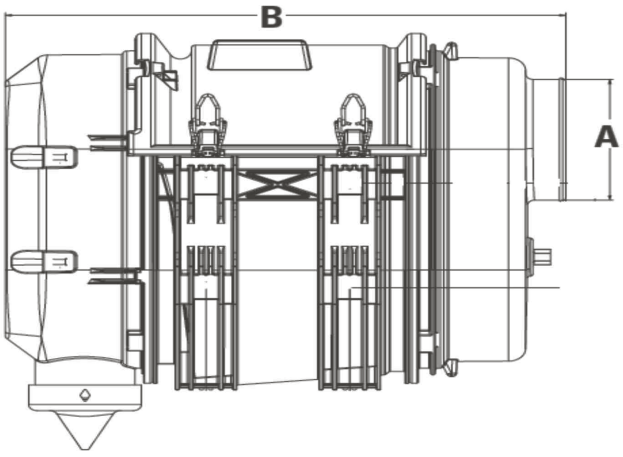
PSD Powercore®

The PSD PowerCore® Air Cleaner is a two-stage air cleaner with build-in high efficiency pre-cleaner using the new PowerCore® Filtration Technology.

PowerCore® Features & Benefits:

- Axial Flow
- High Media Area & High efficiency
- Low Restriction
- Highly efficient Ultra-Web® Media
- Environmentally Friendly Non-Metal
- RadialSeal™ Sealing Technology Easy to Service

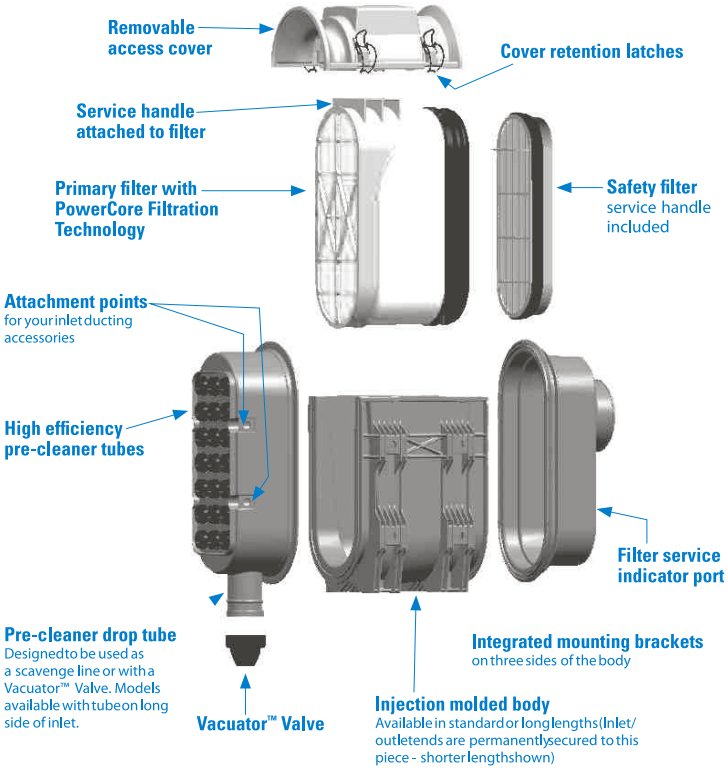




Air Cleaners

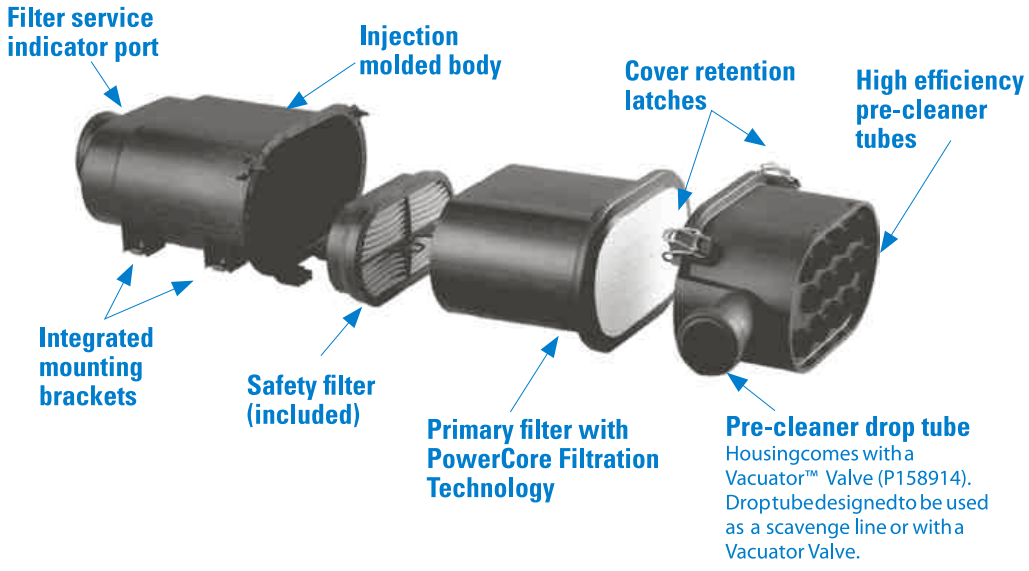
Service Access on Side - PSD08, PSD09, PSD10 and PSD12

Exploded view is of D090073 model. For tube on long side of inlet end, consider D090120 or D090121.



Service Access on Inlet End - PSD08

Exploded view is of D080020. For tube on long side of inlet end (opposite clams), consider D080026



Air Cleaners

Part No	Orientation	A	B	C	D	Initial Airflow restriction (nscavenged)		
						m³/min@150 mm	m³/min@ 200 mm	m³/min@250 mm
PSD080020	Horizontal	89	380	256	154	5.0	5.8	6.6
PSD080026	Vertical	89	380	256	154	5.0	5.8	6.6
PSD090055	Horizontal	102	432	363	180	7.6	8.9	10.1
PSD090073	Vertical	102	433	362	180	8.3	9.8	11.1
PSD090089	Horizontal	102	502	180	362	6.8	10.0	12.0
PSD090091	Horizontal	102	577	180	365	8.8	10.2	12.6
PSD090120	Horizontal	102	433	360	180	8.3	9.8	11.1
PSD100029	Vertical	127	429	374	254	14.2	16.4	18.5
PSD100030	Horizontal	127	429	374	254	14.2	16.4	18.5
PSD100031	Vertical	152	529	384	254	15.1	17.6	19.8
PSD100032	Horizontal	152	529	384	254	15.1	17.6	19.8
PSD100068	Horizontal	152	529	384	254	15.1	17.6	19.8
PSD100072	Horizontal	127	429	384	254	14.2	16.4	18.5
PSD100122	Vertical	127	605	384	254	15.0	17.5	21.0
PSD120035	Vertical	152	496	430	306	19.8	22.9	25.9
PSD120036	Horizontal	152	496	430	306	19.8	22.9	25.9
PSD120037	Vertical	152	596	441	306	19.8	22.9	25.9
PSD120038	Horizontal	152	596	441	306	19.8	22.9	25.9

PSD Powercore® Service Parts

Part No	Primary Element	Safety Element
PSD080020	P608533	P600975
PSD080026	P608533	P600975
PSD090055	P608665	P606121
PSD090073	P608665	P606121
PSD090089	P787281	P606121
PSD090091	P608675	P606121
PSD090120	P608675	P606121
PSD100029	P608666	P601560
PSD100030	P608666	P601560
PSD100031	P608676	P601560
PSD100032	P608676	P601560
PSD100068	P608676	P601560
PSD100072	P608666	P601560
PSD100122	P608676	P601560
PSD120035	P608667	P607557
PSD120036	P608667	P607557
PSD120037	P608677	P607557
PSD120038	P608677	P607557

Rubber Products

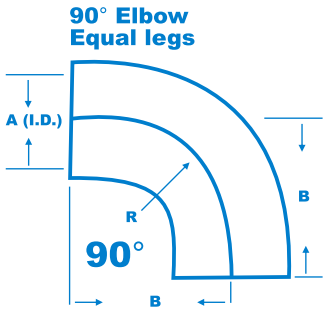
General

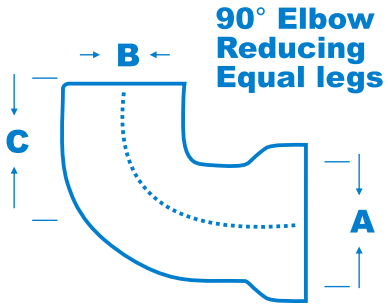
Flexible rubber adapters and elbows have smooth radii and inside surfaces to minimize flow resistance within the air intake system.

Specifications

- EPDM rubber construction for improved heat resistance and low temperature flexibility (-40°C to 100 °C).
- Non corrosive construction resists tears, punctures, and vacuum collapse under severe conditions.
- Ideal for light-, medium- and heavy-duty applications.
- Elbows ribbed or compounded for extra strength and durability.
- Rubber adapters help to absorb vibrations and reduce intake noise level.

90° Rubber Elbows & Reducing Elbows Equal Legs

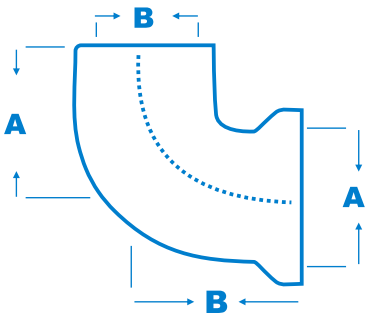


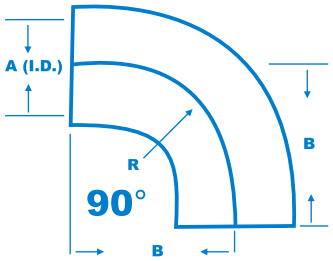


90° Elbows Equal Legs		
Part No	**Dia "A"**	**Leg "B"**
P105529	51	89
P105530	57	95
P105531	64	102
P105532	76	133
P114318	89	140
P105533	102	146
P113733	114	140
P107844	127	156
P105534	140	171
P105535	152	179
P105536	178	192
P112605	203	216

90° Elbows Equal Legs - Reducing			
Part No	**Dia "A"**	**Dia "B"**	**Leg "C"**
D1430	76	70	134
P123462	89	76	89
E500870	90	75	135
E500871	100	90	185
P117724	138	152	170

90° Rubber Elbows & Reducing Elbows Unequal Legs

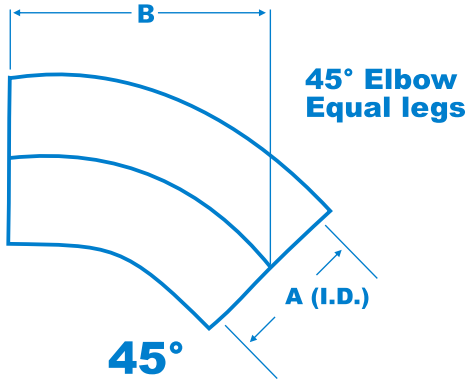


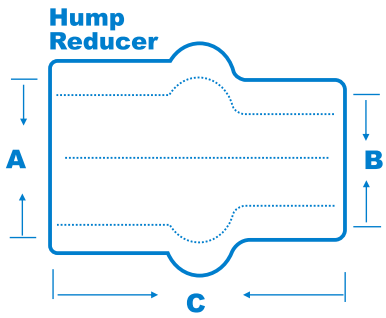


90° Elbows Unequal Legs - Reducing				
Part No	Dia "A"	Dia "B"	Leg "C"	Leg "D"
D1140	100	126	120	135
D1753	62	72	93	105
D3284	76	102	89	105
D2998	76	89	89	121
E500519	89	63	89	76

90° Elbows Unequal Legs - Reducing				
Part No	Dia "A"	Dia "B"	Leg "C"	Leg "D"
P159820	127	178	159	178
P143895	127	152	153	178
P128990	140	178	146	159

45° Rubber Elbows and Rubber Hump Reducer



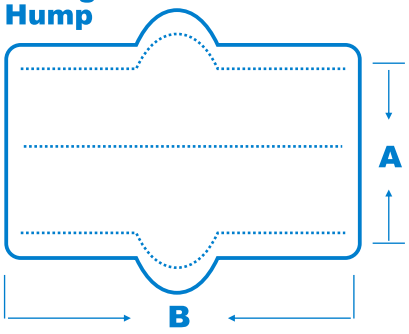


Part No	Dia "A"	Leg "B"
P10-5541	51	102
P10-5542	57	105
P10-5543	64	106
P10-5544	76	140
P109331	89	127
P105545	102	140
P114316	114	128
P109021	140	155
P105546	140	155
P105547	152	164
P105548	178	203
P112606	203	205

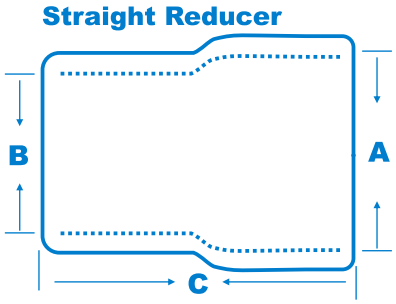
Part No	Dia "A"	Dia "B"	Leg " C"
P102820	76	64	114
P520883	76	70	89
P101290	87	76	127
P920058	95	76	127
P101292	102	87	133
P101291	102	76	133
P520884	102	70	102
P126530	179	140	179
P101293	127	102	152
P103516	140	127	152
P101294	152	140	152
P112611	152	127	152
P112610	179	152	152
P114315	203	152	152
P112609	203	179	152

Straight Rubber Hump and Straight Reducers

Straight Hump

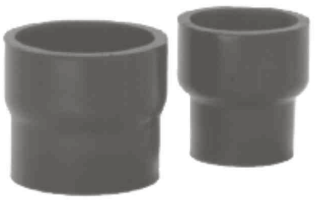


Straight Reducer



Part No.	Dia "A"	Length "B"
P105608	76	135
P105609	102	133
P114317	114	152
P105610	127	152
P105611	140	152
P105612	152	179
P105613	178	179
P112608	203	127
P111414	254	152

Part No	Dia "A"	Dia "B"	Length "C"
P102948	51	44	64
P104087	51	38	64
P104088	57	51	64
P104090	64	57	64
P104089	64	51	64



Clamps

Worm-Drive Hose Clamps and T-bolt Clamps

- Versatile clamps for wide size range of hose connections.
- Made of strong, durable, noncorrosive stainless steel.
- Inside of clamp is lined so that hose doesn't bulge through clamp holes.
- Narrow band enables easy installation in confined areas.

Worm-Drive Hose Clamps

Part No.	Clamping range (mm)
D1419-04	6.0 - 16
D1419-06	10 - 22
D1419-08	14 - 25
D1419-12	14 - 32
D1419-16	17 - 38
D1419-20	19 - 44
D1419-24	25 - 51
D1419-28	32 - 57

Part No.	Clamping range (mm)
D1419-32	38 - 63
D1419-36	44 - 70
D1419-40	51 - 76
D1419-44	57 - 82
D1419-48	63 - 89
D1419-52	70 - 95
D1419-54	72 - 98
D1419-60	82 - 108

Part No.	Clamping range (mm)
D1419-64	89 - 114
D1419-72	102 - 127
D1419-80	117 - 140
D1419-88	120 - 152
D1419-96	135 - 165
D1419-104	152 - 178
D1419-112	165 - 190
D1419-128	185 - 216
D1419-152	206 - 254

T-Bolt Clamps

Part No.	Clamping range (mm)
D2835-50	62 - 70
D2835-62	71 - 79
D2835-68	76 - 84
D2835-72	79 - 87
D2835-76	83 - 91
D2835-80	86 - 94
D2835-84	89 - 97
D2835-92	95 - 103
D2835-106	106 - 114
D2835-108	108 - 116
D2835-116	114 - 122
D2835-126	122 - 130
D2835-134	129 - 137
D2835-138	132 - 140

Part No.	Clamping range (mm)
D2835-142	135 - 143
D2835-144	137 - 145
D2835-154	145 - 152
D2835-158	148 - 156
D2835-164	152 - 160
D2835-170	157 - 165
D2835-174	160 - 168
D2835-186	170 - 178
D2835-196	178 - 186
D2835-208	187 - 195
D2835-212	191 - 198
D2835-218	195 - 203
D2835-242	214 - 222

Restriction Indicators

ServiSignal™ Mini Indicator

Small enough to fit just about anywhere (only 42 mm high), The Donaldson ServiSignal™ shows a highly visible, bright red flag in the full-view window when restriction limit is reached. Resets manually via top button after air cleaner service.

Part No	Restriction limit (metric)	Colour Coding
RBX002250	Indicates at restriction of 3.7 kPa/15" H_2O	White
RBX002251	Indicates at restriction of to 5 kPa/20" H_2O	Green
RBX002252	Indicates at restriction of to 6 kPa/25" H_2O	Red

The Informer™ for Graduated, Continuous Readings

The Informer (74 mm high), when mounted on the air cleaner or the dashboard, provides a continuous reading whether the engine is running or is shut down. Reset button is on top.

Part No	Restriction limit (metric)	Colour Coding
RBX002278	Measures restriction up to 5 kPa/20" H_2O	Green
RBX002277	Measures restriction up to 6 kPa/25" H_2O	White
RBX002275	Measures restriction up to 7.5 kPa/30" H_2O	Lime

Electrical Indicators Connects to Light, Buzzer, or Computer

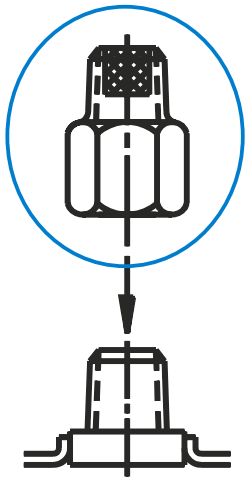
- Designed for a variety of on- and off-highway applications.
- Should be screwed on the air cleaner nipple by hand.
- Operating temperatures of -40°C to +100°C.
- When restriction level reaches the maximum recommended limit, an electrical signal activates a light, a buzzer, or a computer, as you choose.
- The indicator automatically resets itself after the filter is serviced.
- 12-24 Volts.
- Switch contacts are normally in the open position.
- If inductive load can occur, appropriate protection must be provided.
- Quick connectors and light, buzzer, or computer must be purchased separately.
- Contacts have no polarity.

Part No	Restriction limit (metric)	Colour Coding
REX770037	Indicates at restriction of 3.7 kPa/15" H_2O	Red
REX770050	Indicates at restriction of to 5 kPa/20" H_2O	Green
REX770062	Indicates at restriction of 6 kPa/25" H_2O	White
REX770075	Indicates at restriction of to 7.5 kPa/30" H_2O	Lime

Restriction Indicator Fittings

Part No	Description
P100091	Nylon cap res fitting
D1397-11	45°Elbow fitting
P105168	Dash mount
D139701	Male fitting / nylon tube

Part No	Description
D1397-05	Female fitting / nylon tube
P11-0796	Air cleaner fitting (flanged)
P12-2067	Fitting with Filter M / F
P10-0089	Fitting with Filter M / M



Representative thread diagram

Vacuator™ Valve

The dust cup, where pre-cleaned dust is collected, is normally under a slight vacuum when the engine is running. The normal engine pulsing of the vacuum causes the Vacuator™ Valve (located at the lowest point on the dust cup) to open and close. This action automatically expels any collected dust and water. The Vacuator™ Valve also unloads when the engine is stopped.

Part No.	In	Mm	Used on Air Cleaner styles
P103198	3.0	76	FHG 10", 12", 14" and 16", FTG, FWA 5 – 16", SRG FRG 18", FHG08, FVG160587
P106593	3.0	76	FHG 6-8", High Pulsation models
P112803	3.0	76	FHG 6-8", SBG 14-16", STG 12-16"
P149099	1.0	25	ERA, EBA, EBB, ECG
P158914	2.0	51	FPG 6", and 8", FRG 5-9", 11"
P522958	2.0	51	FHG 5", FWG, FWA, In-line water separators & moisture skimmers FPG 4-5", FHG
P525956	1.0	25	EPG 11", 13" and 15"
P776008	2.0	51	FRG 10", 13" and 15'

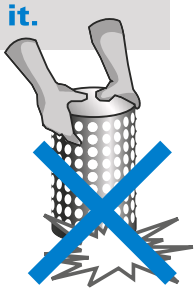
Maintenance
Air Filter Service Tips

Don't remove an air filter for inspection.

Such a check will always do more harm than good. Ridges of dirt on the gasket sealing surface can drop on the clean filter side when the gasket is released. Stick with the regular maintenance schedule, or, if you service by restriction, believe the gauge or restriction indicator. Get a new indicator if you don't trust your current one.

Never rap an air filter to clean it.

Rapping hard enough to knock off dust damages the filter and destroys your engine protection. Deeply embedded dirt is never released by tapping. It is always safer to keep operating until you can change to a new filter.

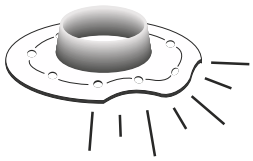


Never leave an air cleaner open.

Your open air cleaner is a direct entry to the engine! Keep it protected during filter changes. Contaminants smaller than we can see will cause damage to a diesel engine. If the housing is not going to be reassembled immediately, cover the opening. The only way to be sure nothing got in, is to make sure nothing can get in!

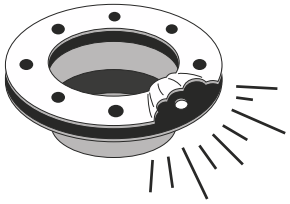
Replace missing or damaged parts.

Check to ensure that there is no damage to the air cleaner housing that could cause a leak. Replace any missing or damaged Vacuator Valves and air cleaner fasteners. Never attempt to repair a damaged filter.



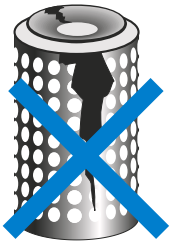
Don't ignore worn or damaged gaskets.

If your air cleaner has a cover gasket, replace it with a new one. Always check to be sure that no piece of the old gasket remains in the housing and that the gasket is not worn. If your filter model calls for a new gasket with each use, never reuse the old one.



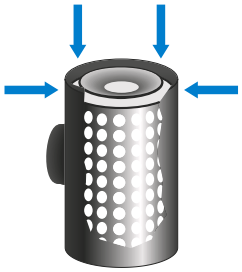
Don't use a damaged or bunched filter.

Never install a dented or punctured filter because it cannot protect properly against contamination. A dent can make a firm seal impossible or can indicate damaged media. A filter with bunched pleats saps engine power, fuel and money.



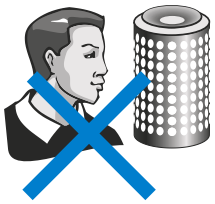
Never substitute by sight.

Filters may look almost identical, but even a fraction of a mm difference in size can prevent a good seal or affect airflow. Selecting a filter by size may give you the wrong media area and grade and therefore affect service life and filter efficiency.



Never judge the filter's life by sight.

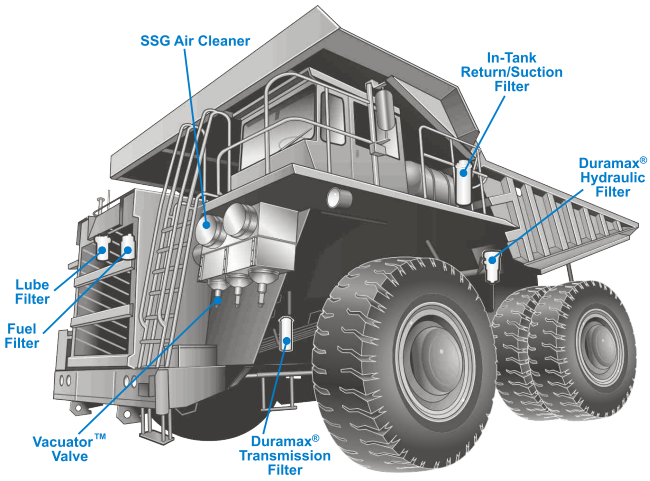
A dirty looking filter may still have plenty of life left. On the other hand, a clean looking filter can also be deceiving as carbon contamination may not be visible to the naked eye. You cannot see the dirt that is embedded deep within the filter paper. Your best option for lowest filter maintenance costs and best engine protection is to follow a restriction indicator. It is a smart, low cost investment.

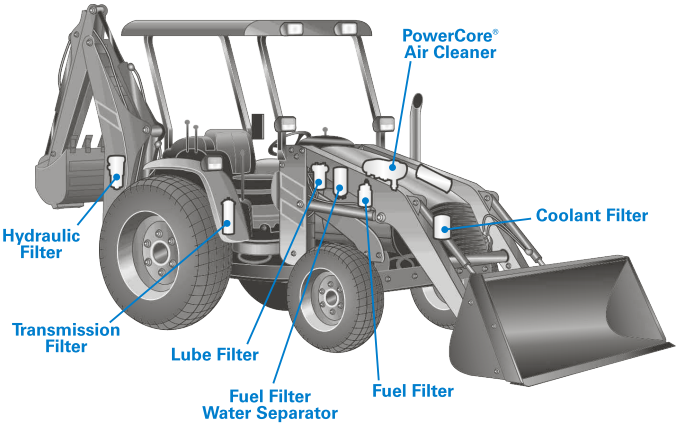


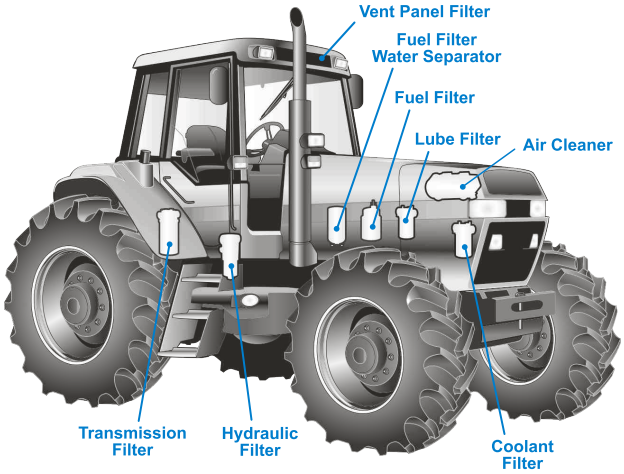
Donaldson does not warranty the use of grease/oil on the sealing faces/ gaskets of air filters. Dirt from the mixture of dust and grease/oil could build up on the sealing area, affecting the sealing and allow dust to by-pass into the system. Grease/oil burned on the compressor wheel of the turbocharger could lead to catastrophic failures of the turbocharger.

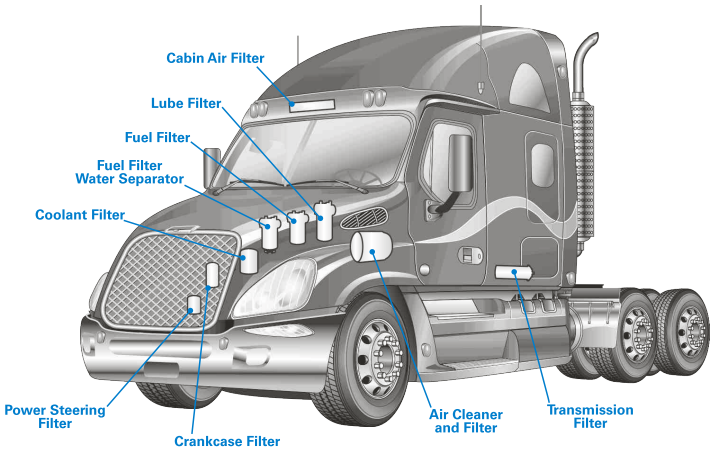
Total Filtration Solutions

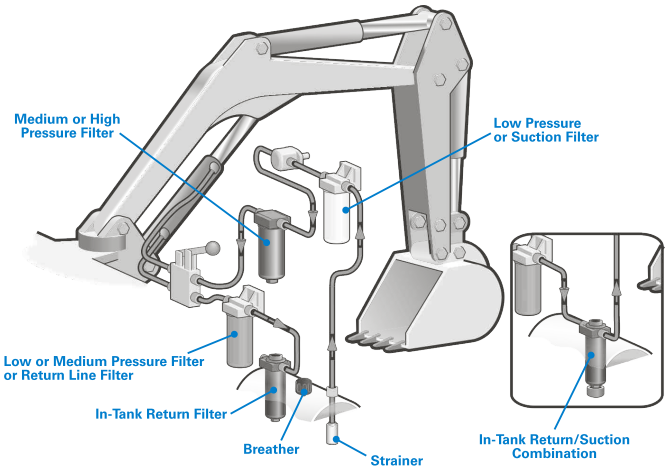
Vehicles • Engine • Equipment

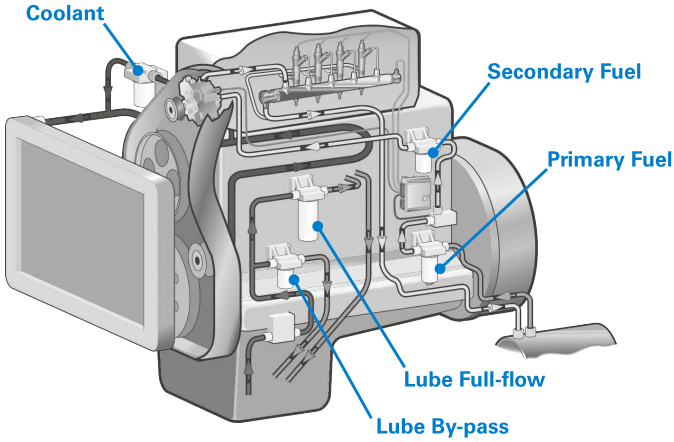












Fuel Filtration

Fuel Water Separators

Donaldson fuel filters provide clean, filtered fuel that prevents pump and injector wear. Donaldson has a complete line of spin-on, and cartridge-style filters.

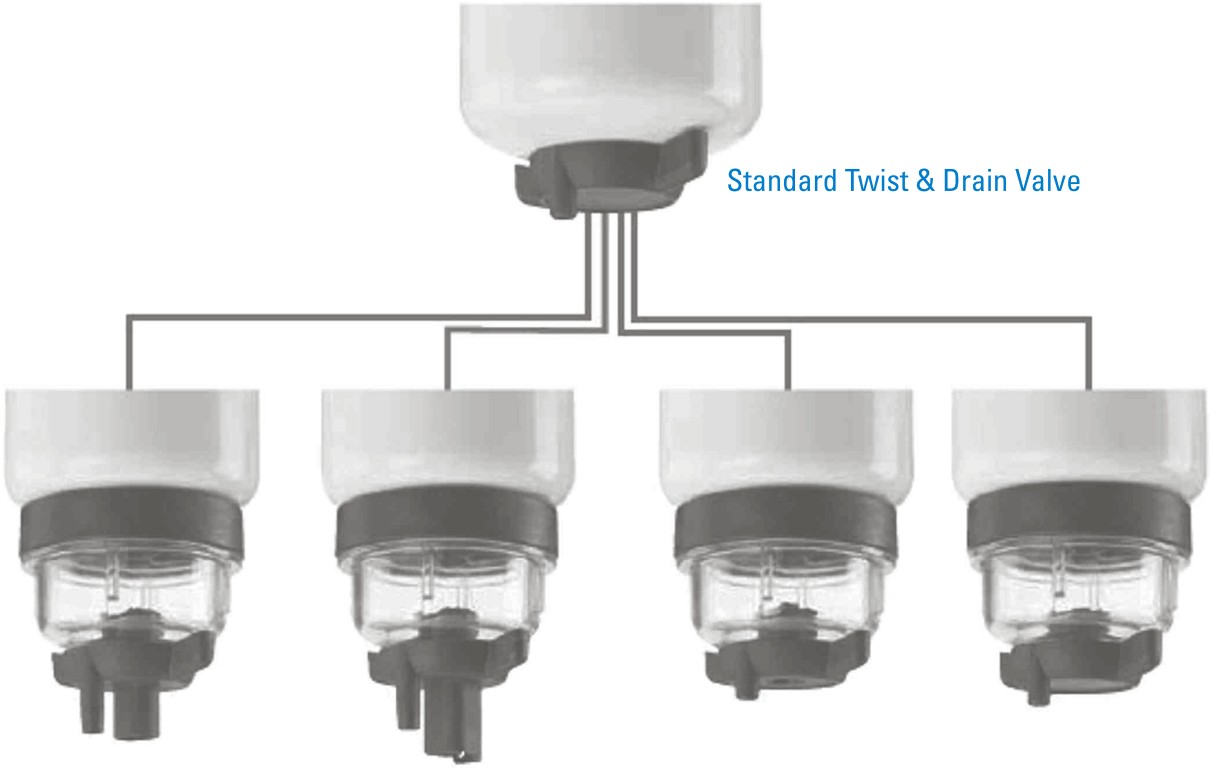
Donaldson's durable fuel filter/water separators trap contaminants carried in the fuel and strip away water that can damage your engine.

Part No	Description
P920683	Replacement cartridge 12l/min – 16 micron absolute
P925683	Replacement cartridge 12l/min – 8 micron absolute
P920711	Replacement cartridge 4l/min – 16 micron absolute
P922395	Mounting head - 7/8" – 14 UNF port sizes
P564276	Glass bowl
1KDFF0030	7/8" – 14 UN x 8 mm Banjo fitting
1KDFF0031	7/8" – 14 UN to 1/4" NPT Bush fitting
1KDFF0032	7/8" – 14 UN x 10 mm Banjo fitting
1KDFF0033	7/8" – 14 UN x 10 mm Hose tail fitting
1KDFF0034	7/8" – 14 UN x 8 mm Hose tail fitting

Accessory Line (Valves & Bowl)

For water drain flexibility, Donaldson Twist & Drain spin-on filters have a connection that accommodates multiple drain valve types and one clear bowl (80ml capacity).

TWIST & DRAIN™



Standard Twist & Drain Valve

P569758: Clear Bowl
P570618: Water-In-Fuel Valve for Packard Sensor includes two replacement seals

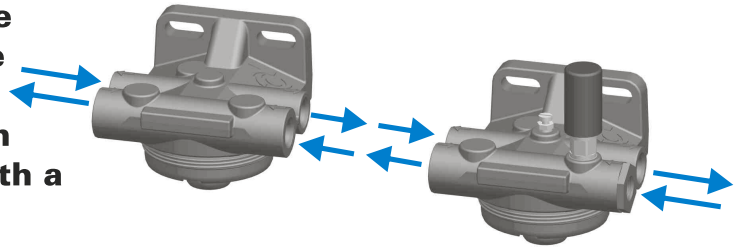
P569758: Clear Bowl
P570619: Water-In-Fuel Valve for Deutsch Sensor includes two replacement seals

P569758: Clear Bowl
P550865: Valve for 1/2"-20 UNF Threaded Port Sensor (Racor style) two replacement seals

P569758: Clear Bowl shown with standard valve (not sold separately)

Fuel Heads and Fuel Spin-On Filters

These filter heads can be mounted on the engine or on the chassis. Two options are available, with and without the priming pump. Both can take either a fuel spin-on filter or a water separator that comes with a standard twist and drain valve.

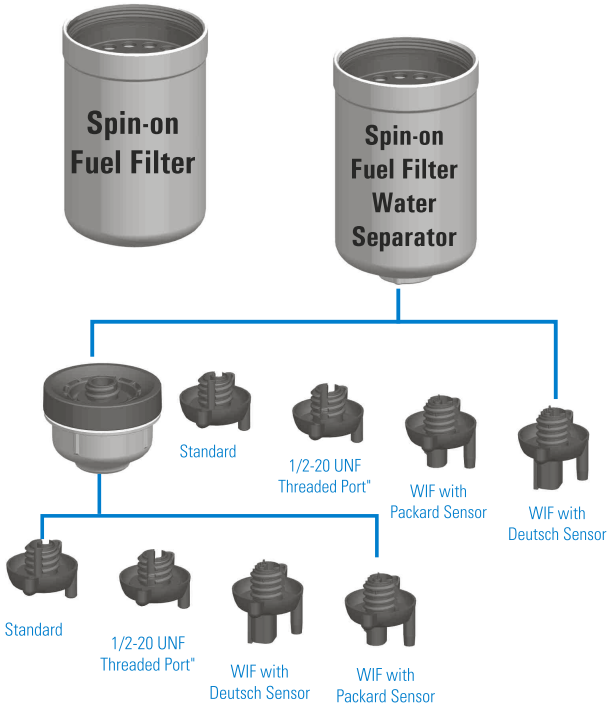


Features

Fuel flow range: up to 340 liters per hour
Port sizes: 1/2 – 14 NPT
Operating pressure: -275 kPa to 690 kPa

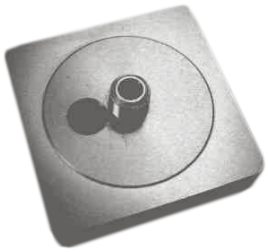
Part No	Description
P566308	Filter head
P566309	Filter head with priming pump

Part No	Description	Max flow Rate	Efficiency @Micron
P566312	Fuel water separator	341 Liters per hour	99% @ 13
P566310	Spin-on Filter	170 Liters per hour	99% @ 3
P566311	Spin-on Filter	170 Liters per hour	99% @ 8



Uni-heads

Donaldson Uni-heads can handle 4 liters per minute on the suction side (or 10 liters per minute on low pressure applications). This is largely depended on the fluid being filtered, the filter elements fitted and system's tolerance to pressure drop.



Part No	Spigot size	Port size
1KDFF1040	11/16 "-16TPI	3/8 NPT
1KDFF1041	1" – 14TPI	
1KDFF1042	3/4" – 16TPI	
1KDFF1043	1" – 12TPI	
1KDFF1044	M16 x 1.5	

Coolant Filtration

SCA/SCA + Chemical Differences

What are the SCA chemicals and how do they do their job?

- Nitrite is the key chemical component in SCA cooling system treatment. Nitrite provides protection against cavitation, erosion, and it inhibits corrosion. Nitrite also provides corrosion protection to aluminum and solder.
- Borate functions as an alkaline buffer to prevent acidity and controls Ph.
- MBT (Mercaptabenzothiazole) provides a plating effect on all copper and copper alloys, protecting them from direct contact with coolant and oxygen, and subsequent corrosion.
- Silicate reduces corrosion of ferrous metals and is an effective aluminum corrosion inhibitor.

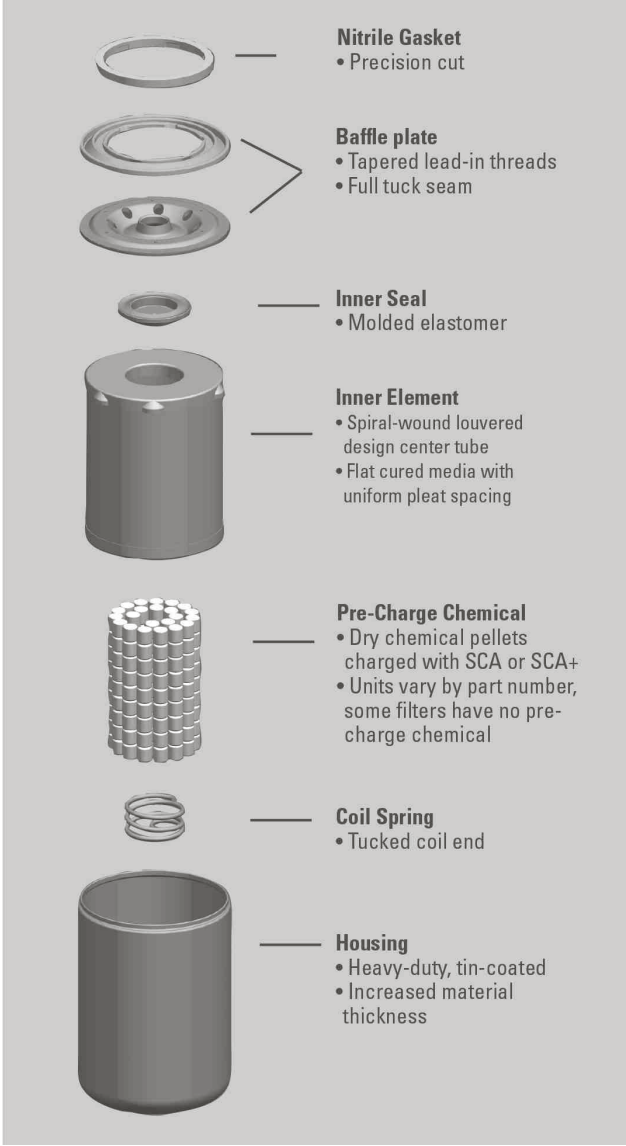
While the chemical composition of SCA+ Cooling System Treatment features some of the same chemicals, there are differences.

Molybdate and Nitrite are combined to provide cavitation erosion protection and inhibit corrosion.

Silicate reduces corrosion of ferrous metals and is an effective aluminum corrosion inhibitor. Phosphate functions as an alkaline buffer to prevent acidity and controls pH.

Donaldson SCAs combat a whole series of coolant system problems including, rust, scale from minerals, acidity from antifreeze, the intrusion of air fuel and oil to coolant, pitting of engine parts from cavitation, foaming from coolant aeration and silicate drop-out from over-concentration.

SCA may be substituted for DCA2 and BTE
SCA+ may be substituted for DCA4 and BTA Plus



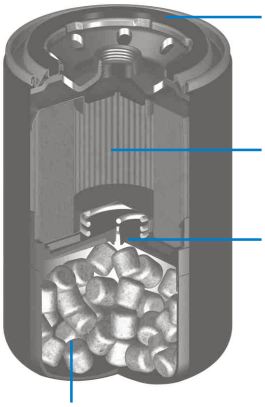
Coolant Spin-On Filters

SCA/SCA + Chemical Differences

Donaldson coolant filters are designed to work in a wide variety of operating environments and meet the service requirements of the majority of heavy-duty diesel engines.

	Non-Chemical Blanks			
Part No.	**Thread**	**OD (mm)**	**Length (mm)**	**Efficiency @ Micron**
P554685	11/16 - 16	93	136	50% @ 20

SCA Filters					
Part No.	**Thread**	**OD (mm)**	**Length (mm)**	**SCA Quantity**	**Efficiency @ Micron**
P554071	11/16 - 16	93	107	4 units	50% @ 25
P554072	11/16 - 16	93	107	6 units	50% @ 25
P554073	11/16 - 16	93	136	8 units	50% @ 25
P554074	11/16 - 16	93	136	12 units	50% @ 25
P554075	11/16 - 16	93	136	15 units	50% @ 25
P552055	11/16 - 16	109	200	23 units	50% @ 20
P554860	3/4 - 20	93	136	8 units	99% @50
P552096	M16 x 1.5	93	136	5 units	99% @50
P554019	M16 x 1.5	93	136	8 units	99% @50



SCA+ Filters					
Part No.	**Thread**	**OD (mm)**	**Length (mm)**	**SCA+ Quantity**	**Efficiency @ Micron**
P552076	11/16 - 16	93	200	23 units	50% @ 20
P552071	11/16 - 16	94	105	4 units	50% @ 25
P552070	11/16 - 16	94	103	2 units	50% @ 25
P552072	11/16 - 16	94	103	6 units	50% @ 25
P552073	11/16 - 16	94	135	8 units	50% @ 25
P552074	11/16 - 16	94	135	12 units	50% @ 25
P552075	11/16 - 16	94	135	15 units	50% @ 25
P550866	M36 x 2	94	146	8 units	99% @50

Ready-to-use Coolant

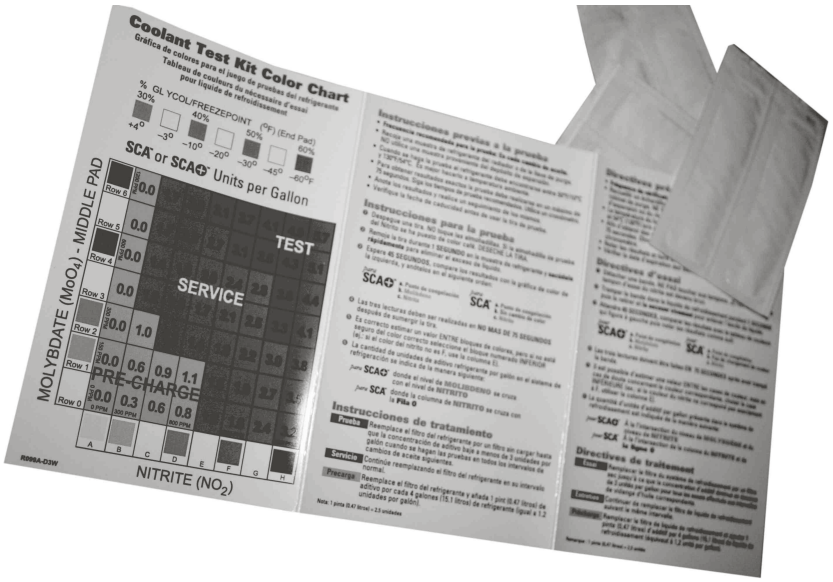
This ready-to-use coolant package eliminates problems in diesel engine cooling systems created by incorrect coolant mixing procedures and poor quality water. It contains all required additives and is ready to be added to your system as is- no further mixing is required. Stringent quality measures are employed during mixing of this product to ensure that this product meets engine manufacturer specification.

Part Number	Description	Litres
1KDFF1111	Flow Bin with ready to use coolant	1000
1KDFF1110	Drum with ready to use coolant	210
1KDFF1109	Drum with ready to use coolant	20

Test Strip Kit

Donaldson test kits offer a quick, one minute test that helps you maintain that cooling system chemical balance. Donaldson recommends testing your coolant twice a year.

Part No	Description
X007684	Engine liquid test kit – 12 pack (replaces X007103)

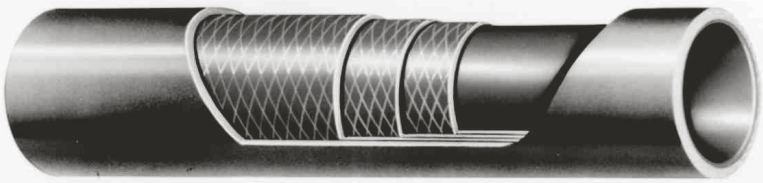


Coolant Hoses

3-ply Coolant Hoses

Donaldson 3-ply, 910 mm length hoses are reinforced with three layers of polyester fabric and coated with unique silicone elastomer. These hoses are designed to withstand extremes in operating temperatures ranging from 54°C to 177°C.

Part No	Outer Diameter (mm)	Inner Diameter (mm)
P171371	24	16
P171372	27	19
P171373	30	22
P171374	34	25
P171375	37	29
P171376	48	32
P171377	43	35
P171378	46	38
P171379	50	41
P171380	53	44
P171381	59	51
P171382	66	57
P171383	69	60
P171384	72	64
P171385	75	67
P171386	78	70
P171387	85	76
P171388	97	89
P171389	110	102



3-ply Coolant Hose Cutaway Illustration

Service Instructions

Fuel, Lube and Coolant Service Tips

When filling a filter with liquids remember to add the oil, fuel or coolant to the “dirty side” of the filter. Don’t make the mistake of pouring unfiltered liquid down the filter center tube.

Apply a thin film of clean motor oil to the new filter gasket — DO NOT USE GREASE.

Be sure never to use fuel to lube up the gasket. Fuel isn’t as lubricating as oil and can cause the new gasket to bunch up and leak.

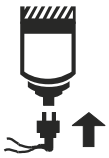
Twist&Drain™ Icons Installation & Water Drain

Filter will indicate if you should fill with fuel before installation.

Apply a thin film of clean motor oil to the new gasket. Do not use Grease.

Line up the filter threads to the threaded port carefully. Screw on and tighten until gasket makes contact with base.

For final tightening of the filter, turn the can to the number of turns (+) indicated on the can.



Reconnect the WIF sensor.

Three easy steps with standard drain valve:

Water Draining

Donaldson
FILTRATION SOLUTIONS

0860 FILTER (345837)
+27 (0) 11 997 6000
SAMarketing@donaldson.co.za
www.donaldson.co.za
Donaldson – World leaders in Filtration Solutions