

Replacement Filter Elements

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SOLBERG[®]
Filtration • Separation • Silencing

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Replacement
Elements

Filter Element Efficiency

When choosing a filter media type, an accurate and useful filter efficiency rating must have two components: Efficiency and Micron Filtration Rating.

The micron rating of a media means very little if the efficiency percentage is unknown. For example, a 1 micron media rated at 60% efficiency may offer less filtration than a 5 micron media rated at 99% efficiency. Always make sure you have both when you compare different media types for your application.

Element Maintenance

Solberg elements should be cleaned or replaced once the pressure drop reaches 15-20" H₂O above the initial pressure drop of the installation.

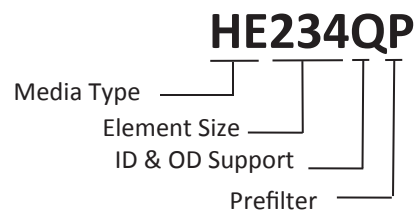
The decision to clean the element rather than replace it is left to the discretion of the operator. Any damage which results from by-pass or additional pressure drop created by element cleaning is the sole responsibility of the operator.

Note: The overall performance of a filter element is altered once cleaned. The initial pressure drop after subsequent cleanings will be greater than the original, clean pressure drop of the element. After each cleaning, the pressure drop will continue to increase. Under all circumstances, the initial pressure drop of the element needs to be maintained at less than 15" H₂O.

Once the element has been cleaned, if the pressure drop exceeds 20" H₂O at start-up; it must be replaced with a new element. With many types of equipment, the maximum pressure drop allowed will be dictated by the ability of the equipment to perform to its rated capacity. Under all circumstances, the operator should avoid exceeding the manufacturer's recommended maximum pressure drop for their specific equipment.

Identification

The element part number designates media type and depending on the element: support material, gasket type, potting adhesive and if it comes with an element prefilter wrap. For example, the following part number HE234QP, identifies the filter element as having a HEPA media "HE", with dimensions of a 234 element, "Q" designates stainless steel ID & OD & endcaps, and "P" means it has a prefilter wrap. See partial list below for other filter media designations.



Filter Media Nomenclature *(contact Solberg for other media types and stainless steel.)*

Polyester Std.: 5 µm, i.e. **385**
Paper Std.: 2 µm, i.e. **384**
Z Media: 1 µm Polyester, i.e. **15Z**
HE Media: HEPA, i.e. **HE10**
UL Media: ULPA, i.e. **UL234**
DT Media: Dutch Twill, i.e. **DT375**
MX Media: Nomex, i.e. **377MX**

TF Media: PTFE, i.e. **TF345**
TG Media: Hi-Temp PTFE, i.e. **TG235**
PSG Media: Coalescing, i.e. **PSG244**
AC Media: Activated Carbon, i.e. **AC18**
GM Media: Electrostatic AC, i.e. **GM35**
AA Media: Actvtd Alumina, i.e. **AA850**
ACG Media: AC Granulate, i.e. **ACG30**

RY Media: PPS, i.e. **RY485**
Y Media: Polypropylene, i.e. **849Y**
ZE Media: Zeolite, i.e. **ZE848**
S Media: Wire Mesh, i.e. **274S**
N Media: 4 µm Polyester, i.e. **231N**
U Media: 25 µm Polyester, i.e. **685U**
W Media: 100 µm Polyester, i.e. **15W**

Polyester Element Features

- Identified typically by “odd number” nomenclature:
i.e. 19, 235P
- Pleated industrial needle felt polyester media
- Reinforced with epoxy coated steel wire on both sides of the media
- Dust loading capacity is increased 40-50% with prefilter.
“P” designation at end of element part number i.e.: 235P

Technical Specifications

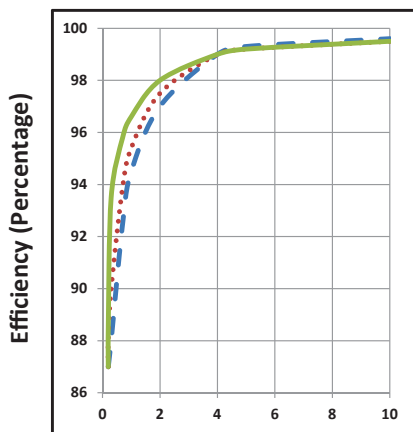
- 5 Micron, 99+% efficiency
- Media classification: EU8, F8
- Temperature min: -15°F (-26°C), max: 220°F (104°C)

Advantages

- Less maintenance: Washable
- More durable
- Moisture resistant
- Handles hot air and oil mist from unload cycle of reciprocating/piston compressor

Particle Size vs. Filter Efficiency Polyester Media at Indicated Face Velocity:

- 15 CFM/ft² media —————
- 30 CFM/ft² media (red dots)
- 45 CFM/ft² media - - - - -



**Polyester Media
Efficiency Chart**

Paper Element Features

- Identified typically by “even number” nomenclature:
i.e. 18, 234P
- Heavy duty industrial strength paper surrounded by heavy gauge galvanized expanded metal
- Dust loading capacity is increased 40-50% with prefilter
“P” designation at end of element part number i.e.: 234P

Technical Specifications

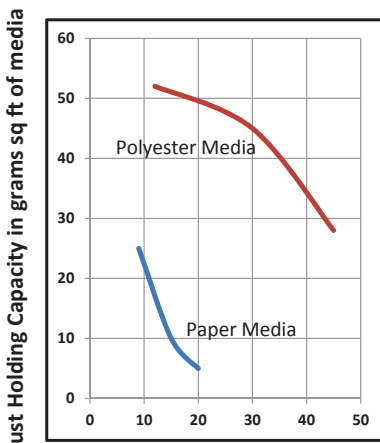
- 2 Micron, 99+% efficiency
- Media classification: EU9, F9
- Temperature min: -15°F (-26°C), max: 220°F (104°C)

Advantages

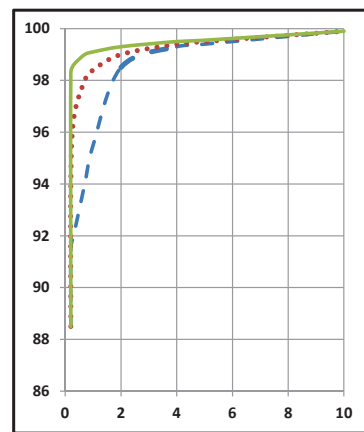
- Optimal surface area available
- Higher efficiency than many alternative media
- Cost Effective

Particle Size vs. Filter Efficiency Paper Media at Indicated Face Velocity:

- 10 CFM/ft² media —————
- 15 CFM/ft² media (red dots)
- 20 CFM/ft² media - - - - -



**Face Velocity vs.
Dust Holding Capacity**



**Paper Media
Efficiency Chart**

Note: Efficiency charts are based on SAE Fine Dust Test.

Filter Media Specifications



Standard Media

5 µm Polyester, 5 Micron, 99+% efficiency

- ID: "odd nbr.": i.e. **19**, **235P**
- Media classification: F8
- Pleated industrial needle felt polyester media
- Plastisol potting
- Temperature min: -15°F (-26°C), max: 220°F (104°C)
- Reinforced epoxy coated steel wire on ID and OD

2 µm Paper, 2 Micron, 99+% efficiency

- ID: "even nbr.": i.e. **18**, **234P**
- Media classification: F9
- Heavy duty industrial strength paper
- Plastisol potting
- Heavy gauge galvanized expanded metal
- Temperature min: -15°F (-26°C), max: 220°F (104°C)

High Efficiency

1 µm Polyester - Z Media, 1 Micron, 99+% efficiency

- ID: "odd nbr." & "Z" suffix: i.e. **19Z**, **235ZP**
- Media classification: F9
- Epoxy coated steel wire on both sides of media
- Temp min: -15°F (-26°C), max: 220°F (104°C)
- Washable - lukewarm water & mild detergent

4 µm Polyester - N Media, 4 Micron, 99+% efficiency

- ID: "odd nbr." & "N" suffix: i.e. **15N**, **377NP**
- Media classification: F9
- Temp min: -15°F (-26°C), max: 220°F (104°C)

HEPA - HE Media, 0.3 Micron, 99.97% efficiency

- ID: "HE" prefix & "even nbr.": i.e. **HE230**, **HE334P**
- Media classification: H13
- Heavy duty industrial strength glass surrounded by heavy gauge galvanized expanded metal
- Maximum oversizing required to minimize pressure drop
- Plastisol potting standard
- Temp min: -15°F (-26°C), max: 220°F (104°C)
- Options: silicone potting, viton gaskets
- Temp max: 375°F (190°C)

ULPA - UL Media, 0.1 Micron, 99.995% efficiency

- ID: "UL" prefix & "even nbr.": i.e. **UL234**
- Media classification: H14
- Plastisol potting
- Temp min: -15°F (-26°C), max: 220°F (104°C)
- Options: silicone potting, viton gaskets
- Temp max: 375°F (190°C)

Dutch Twill Weave - DT Media

- ID: "DT" prefix & "odd nbr.": i.e. **DT245**
- Media classification: F9
- Stainless steel woven wire cloth
- Viton gaskets & epoxy potting
- Temp min: -15°F (-26°C), max: 375°F (190°C)



Chemical/Food/Pharmaceutical

Stainless Steel Wire Mesh- S2 Media

- Stainless steel pleated wire mesh
- ID: "even nbr." & "S2" suffix: i.e. **14S2**
- Stainless steel expanded metal
- Chemical resistant and high temperature resistant
- Available with silicone endcaps

Polypropylene (PP) - Y Media, 5 Micron, 99+% efficiency

- ID: "odd nbr." & "Y" suffix: i.e. **31Y**, **345YP**
- Media classification: F8
- Epoxy coated steel wire on ID and OD

PTFE - TG Media, 0.3 micron, 99.5% efficiency

- ID: "TG" prefix & "odd nbr.": i.e. **TG375**
- Media classification: E12
- High temperature, chemical, & moisture resistant
- Options: Viton gaskets, epoxy potting
- Temp (intermittent): Up to 482°F (250°C)

PTFE - TF Media, 0.3 micron, 99.5% efficiency

- ID: "TF" prefix & "odd nbr.": i.e. **TF275**
- Media classification: E12
- Chemical & moisture resistant
- Minimal pressure drop
- Temp (intermittent): 220°F (104°C)
- Options: Viton gaskets, epoxy potting

PPS - RY Media

- Broad chemical resistant media, high temp
- ID: "RY" prefix & "odd nbr.": i.e. **RY485**
- Media classification: F8
- Temp min: -15°F (-26°C), max: 220°F (104°C)
- Options: Viton gaskets, epoxy potting



Coarse Efficiency

25 µm Polyester - U Media, 25 Micron, 99+% efficiency

- ID: "odd nbr." & "U" suffix: i.e. **19U**, **685UP**
- Media classification: F7
- Temp min: -15°F (-26°C), max: 220°F (104°C)

100 µm Polyester- W Media, 100 Micron, 99+% efficiency

- ID: "odd nbr." & "W" suffix: i.e. **15W**, **385WP**
- Media classification: M6
- Temp min: -15°F (-26°C), max: 220°F (104°C)

Wire Mesh - S Media

- Epoxy coated pleated wire mesh
- ID: "even nbr." & "S" suffix: i.e. **274S**, **344SP**
- Expanded metal
- Temp min: -15°F (-26°C), max: 220°F (104°C)

Stainless Steel - S2Media

- Stainless steel pleated wire mesh
- ID: "even nbr." & "S" suffix: i.e. **234S2**
- Chemical resistant and high temperature resistant
- Stainless steel expanded metal
- Temp min: -15°F (-26°C), max: 220°F (104°C)
- Options: silicone or epoxy potting, Viton gaskets

Note 1: Elements rated for higher temperatures can be achieved with optional gasket material and potting compounds.

Note 2: Media classifications are best estimates based on EN 779:2012.

Contact Factory for Alternate Media

Filter Media Specifications

High Temperature

Nomex - MX Media, 5 Micron, 99+% efficiency

- ID: "odd nbr." & "MX" suffix: i.e. **377MX**
- Media classification: F8
- Silicone potting
- Temperature min: -15°F (-26°C), max: 385°F (196°C)
- Reinforced epoxy coated steel wire on ID and OD

Nomex with Stainless Steel Support- MXD Media, 5 Micron, 99+% efficiency

- ID: "odd nbr." & "MX" suffix: i.e. **377MXD**
- Media classification: F8
- Silicone potting
- Reinforced stainless steel wire mesh on ID and OD
- Temperature min: -15°F (-26°C), max: 385°F (196°C)

Chemical Adsorption

Activated Carbon - AC Media, 10 Micron, 99+% efficiency

- ID: "AC" prefix & "even nbr.": i.e. **AC18**
- Removes gas or vapor odors, contaminants, & particulate
- Pleated media
- Reinforced with epoxy coated steel wire on both sides of cloth

Activated Carbon Granulate- ACG Media

- ID: "ACG" prefix & "even nbr.": i.e. **AC30**
- Removes gaseous or vapor odors
- Granulates are enclosed within a polyester wrap and expanded metal on the I.D. and O.D.

Activated Alumina- AA Media

- ID: "AA" prefix & "even nbr.": i.e. **AA850**
- Desiccant used in the adsorption of water & oil vapor & the prevention of backstreaming in pumps
- Adsorbs up to 40% of media's weight

Electrostatic Activated Carbon- GM Media, 3 Micron, 70% efficiency

- ID: "GM" prefix & "odd nbr.": i.e. **GM35**
- Superior odor removal
- Chemically inert
- Electrostatic fibers attract & hold particles

Coalescing Media

PSG Media, FG Media, GL Media

- 0.3 Micron, 99.97% efficiency
- ID: "PSG" prefix & "even nbr.": i.e. **PSG344**
- ID: "FG" prefix: i.e. **FG9**
- ID: "GL" prefix: i.e. **GL915**
- Heavy duty industrial glass media, reinforced with epoxy coated steel wire & expanded metal
- Continuous operating temp: 68°F (20°C)- 180°F (80°C)
- Environmentally friendly sealing material
- High D.O.P. efficiency - low oil carryover
- Multiple media configurations, contact factory

Replacement Elements 35 - 6600 SCFM Flow Range



Small Elements
with Molded Endcaps



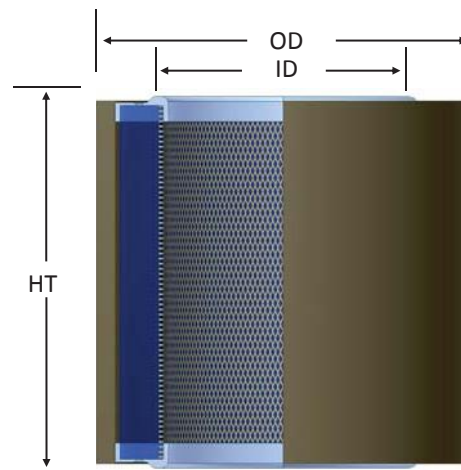
Compact & Large Elements
with Metal Endcaps

Features

- Pleated media for high dirt holding capacity
- Polyester: Reinforced with epoxy coated steel wire on both sides of cloth, expanded metal I.D.
- Paper: Heavy duty industrial strength paper surrounded by heavy gauge galvanized expanded metal
- 40 - 50% increased dust loading capacity with prefilter (part number suffix P)

Technical Specifications

- Polyester: 99+% removal efficiency to 5 micron
- Paper: 99+% removal efficiency to 2 micron
- Temp (continuous): min -26°F (-15°C), max 220°F (104°C)
- Filter change out differential: 15-20" H₂O over initial ΔP



Polyester Media Benefits/Specs

- Less maintenance due to longer durability
- Moisture resistant
- Handles hot air and oil mist from unload cycle of reciprocating/piston compressor
- Washable with lukewarm water and mild detergent (Replacing element is recommended)

Paper Media Benefits/Specs

- Cost effective
- Gently blow out media (Replacing element is recommended)

Replacement Elements—up to 300 SCFM flow

Element Part Number		Element SCFM	Surface Area ft ²		Dimensions - inches			STD Endcap
Polyester	Paper	Rating	Polyester	Paper	ID	OD	HT	Features
15P	14P	35	0.50	1.12	3	4 3/8	2 5/16	M
19P	18P	100	1.50	3.00	3	4 3/8	4 3/4	M
31P	30P	195	2.30	6.20	3 5/8	5 3/4	4 3/4	M
35P	34P	275	4.00	11.00	4 3/4	7 7/8	4 13/16	M
231P	230P	300	4.50	11.8	3 5/8	5 3/4	9 1/2	M

Note: Also available in wire mesh. Example part number for wire mesh: 230S

See Element Technical Data section for maintenance guidelines

Replacement Elements—up to 6600 SCFM flow

Element Part Number		Element SCFM	Surface Area ft ²		Dimensions - inches			STD Endcap
Polyester	Paper	Rating	Polyester	Paper	ID	OD	HT	Features
235P	234P	570	8.3	22.8	4 3/4	7 7/8	9 3/8	M
335P	334P	800	12	34	4 3/4	7 7/8	14 1/2	M
237	236	550	8.6	22.6	4 11/16	7 3/4	8 1/2	GBN
239P	238P	570	11.5	52	4 7/8	9 1/4	10	GBN
245P	244P	880	14	35.5	6	9 3/4	9 5/8	GN M
345P	344P	1100	22.1	57	6	9 3/4	14 1/2	GN
275P	274P	1100	19	45.4	8	11 3/4	9 5/8	GN
375P	374P	1500	28	68.1	8	11 3/4	14 1/2	GN
377P	376P	1825	50	125	9	14 5/8	14 1/2	GN
385P	384P	3300	50	140	14	19 5/8	14 1/2	GN
485P	484P	4705	75	200	14	19 5/8	21 1/2	GN
685P	--	6600	100	--	14	19 5/8	28 1/2	GN

Note: Most are available in wire mesh. Example part number for wire mesh: 274S

See Element Technical Data section for maintenance guidelines

Endcap Information

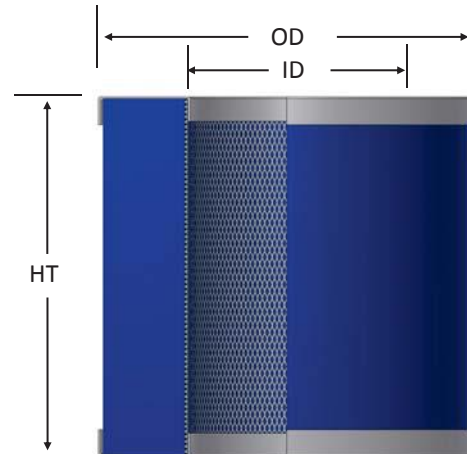
- M = Molded plastisol
- B = Closed one end with bolt hole, open on other end
- G = Galvanized metal endcaps
- N = Neoprene blended gasket on open endcaps

Additional Media Available

Contact factory and/or see page 6-2 to 6-5

Small Vacuum Pump Elements

3 - 375 SCFM Flow Range



Features

- Pleated media for high dirt holding capacity
- Polyester: Reinforced with epoxy coated steel wire on both sides of cloth, expanded metal I.D.
- Paper: Heavy duty industrial strength paper surrounded by heavy gauge galvanized expanded metal O.D.
- 40 - 50% increased dust loading capacity with prefilter (part number suffix P)

Polyester Media Benefits/Specs

- Less maintenance due to longer durability
- Moisture resistant
- Handles hot air and oil mist from unload cycle of reciprocating/piston compressor
- Washable with lukewarm water and mild detergent (Replacing element is recommended)

Technical Specifications

- Polyester: 99+% removal efficiency to 5 micron
- Paper: 99+% removal efficiency to 2 micron
- Temp (continuous): min -15°F (-26°C), max 220°F (104°C)
- Filter change out differential: 15-20" H₂O over initial ΔP

Paper Media Benefits/Specs

- Cost effective
- Gently blow out media
(Replacing element is recommended)

Additional Media Options

Contact factory and/or see page 6-2 to 6-5

Paper Replacement Elements—800 Series

Solberg Part Number	Mann Ref Number	SCFM Rating	Surface Area ft ²	Dimensions - inches			STD Endcap Features
				ID	OD	HT	
800	C31	3	0.14	3/8	1 1/8	1 3/16	GB
802	C31/1	5	0.22	3/8	1 1/8	1 1/2	GB
804	C32	9	0.35	3/8	1 1/8	2 7/16	GB
806	C42/1	8	0.33	1/2	1 1/2	1 1/2	GB
808	C42/2	4	0.18	1/2	1 1/2	1 1/8	GB
810	C43	13	0.55	1/2	1 1/2	2 7/16	GB
812	C44	8	0.33	1/2	1 1/2	1 1/2	GC
814	C64/1	13	0.55	11/16	2 5/16	1 9/16	GB
816	C64/3	13	0.55	11/16	2 5/16	1 9/16	GC
818	C66	20	0.89	11/16	2 5/16	2 7/16	GB
820	C66/1	18	0.76	11/16	2 5/16	2	GB
824	C75	25	0.92	1 1/2	2 1/2	2 11/16	GC
826	C75/2	25	0.92	1 1/2	2 1/2	2 13/16	GCF
828	C76/2	12	0.48	1 1/2	2 1/2	1 3/4	GC
830	C79/1	24	0.91	1	2 1/2	2 7/8	GB
832	C79/2	25	0.92	1 1/2	2 1/2	2 13/16	GCF
834	C713	40	1.5	1 1/2	2 1/2	4 1/2	GBHF
836	C718	48	1.8	1 1/2	2 1/2	6 9/16	GBHF
838	C912	30	1.2	2 3/8	3 5/16	2 3/4	GCF
840	C1049	80	3.5	1 3/4	3 5/8	5 5/8	G
842	C1112	55	1.7	2 3/8	3 7/8	2 3/4	G
844	C1112/2	55	1.8	2 3/8	3 7/8	2 3/4	GCF
846	C1132	62	2.7	2 3/8	3 7/8	3 15/16	G
848	C1337	115	5	2 9/16	5	4 3/4	G
850	C15124/1	290	14	3 1/2	5 7/8	8 3/4	GR
850/1	N/A	290	14	3 1/2	5 7/8	8 3/4	GBR
852	C711/1	24	0.97	1 1/2	2 11/16	2 3/4	GC
854	C411	27	1.1	1/2	1 1/2	5 5/16	GB
856	C26240	375	17	7 11/16	10	7 11/16	G
858	C1574	110	1.3	3 1/2	5 7/8	4 7/8	G
862	C21138/1	322	14	5 11/16	8 3/8	6 7/16	M
868	N/A	25	1	2 3/8	3 11/16	2 15/16	M
870	C69/1	30	1.2	1 1/8	1 15/16	5 5/8	GB
872	C75/2	24	0.93	1 1/2	2 1/2	2 13/16	GBF
874	N/A	180	6	6	8 1/2	3 1/2	GCE
878	N/A	115	5	2 9/16	5	4 3/4	GB
896	N/A	80	5.24	2 3/8	4	8 7/16	GB

Polyester Replacement Elements—800 Series

Solberg Part Number	Mann Ref Number	SCFM Rating	Dimensions - inches			STD Endcap Features
			ID	OD	HT	
821	C66/1	18	11/16	2 5/16	2	GB
825	C75	25	1 1/2	2 1/2	2 11/16	GC
827	C75/2	25	1 1/2	2 1/2	2 13/16	GCF
841	C1049	80	1 3/4	3 5/8	5 5/8	G
843	C1112	55	2 3/8	3 7/8	2 3/4	G
845	C1112/2	55	2 3/8	3 7/8	2 3/4	GCF
847	C1132	62	2 3/8	3 7/8	3 15/16	G
849	C1337	115	2 9/16	5	4 3/4	G
851	C15124/1	290	3 1/2	5 7/8	8 3/4	GR
851/1	N/A	290	3 1/2	5 7/8	8 3/4	GBR
857	C26240	375	7 11/16	10	7 11/16	G
859	C1574	110	3 1/2	5 7/8	4 7/8	G
863	C21138/1	322	5 11/16	8 3/8	6 7/16	M
879	N/A	115	2 9/16	5	4 3/4	GB
897	N/A	80	2 3/8	4	8 7/16	GB

See Element Technical Data section for maintenance guidelines.

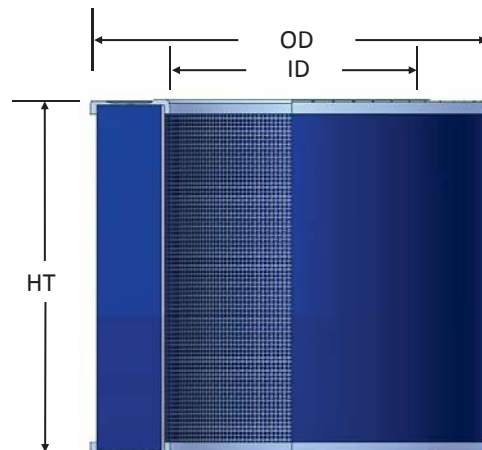
Note: Model offerings and design parameters may change without notice. See www.solbergmfg.com for most current offering.

Endcap Information

- B = Closed one end w/bolt hole
- C = Closed one end
- E = EPDM gasket
- F = Felt gaskets on open endcaps
- G = Galvanized metal endcaps
- H = Felt gasket on bolt hole
- M = Molded plastisol
- N = Neoprene blended gasket on open endcaps
- R = Mixed rubber/cork gasket on open endcaps

Filter Elements

Blower Elements/Special Sizes



Features

- Pleated media for high dirt holding capacity
- Polyester: Reinforced with epoxy coated steel wire on both sides of cloth, expanded metal I.D.
- Paper: Heavy duty industrial strength paper surrounded by heavy gauge galvanized expanded metal
- 40 - 50% increased dust loading capacity with prefilter (part number suffix P, select models)

Polyester Media Benefits/Specs

- Less maintenance due to longer durability
- Moisture resistant
- Handles hot air and oil mist from unload cycle of reciprocating/piston compressor
- Washable with lukewarm water and mild detergent (Replacing element is recommended)

Technical Specifications

- Temp (continuous): min -15°F (-26°C), max 220°F (104°C)
- Filter change out differential: 15-20" H₂O over initial Δ P
- Polyester: 99+% removal efficiency standard to 5 micron
- Paper: 99+% removal efficiency standard to 2 micron

Paper Media Benefits/Specs

- Cost effective
- Gently blow out media (Replacing element is recommended)

Common Filter Elements for the Blower Industry

Solberg			Solberg			Dimensions - inches			STD
Part Number	Universal	EM	Part Number	Universal	EM	ID	OD	HT	Endcap
Polyester	Ref. Number	Ref. Number	Paper	Ref. Number	Ref. Number				Features
32-01	81-1202	---	32-00	81-0470	---	4	5 13/16	2	M
32-03	81-1203	F642	32-02	81-0471	P642	4 1/4	6	2 1/2	M
32-05	81-1204	F974	32-04	81-0472	P974	7 1/4	9 3/4	4	M
32-07	81-1205	F976	32-06	81-1063	P976	7 1/4	9 3/4	6	M
32-09	81-1206	F1197	32-08	81-0474	P1197	9 7/8	11 1/2	7	M
32-11	81-1207	F13118	32-10	81-0475	P13118	11 5/8	13 5/8	8 5/8	M
32-13	81-1209	F171310	32-12	81-1163	P171310	13	17	10	M
32-15	81-1210	F231914	32-14	81-1164	P231914	19	23	14	M

Solberg		Solberg		Dimensions - inches			STD
Part Number	Stoddard	Part Number	Stoddard	ID	OD	HT	Endcap
Polyester	Ref. Number	Paper	Ref. Number				Features
32-17	F8-151	32-16	F8-108	4 3/4	6 7/8	4 3/16	M
32-19	F8-135	32-18	F8-109	7 1/8	10 3/16	5 1/8	M
32-21	F8-134	32-20	F8-110	9 1/2	12 9/16	4 7/8	M
32-23	F8-139	32-22	F8-111	9 1/2	12 9/16	10	M
32-25	F8-148	32-24	F8-137	15	19 3/4	14	M

Note: Contact factory for availability . Also available in wire mesh.

Endcap Information

- G = Galvanized metal endcaps
- M = Molded plastisol
- N = Neoprene blended gasket on open endcaps

Special Sized Filter Elements

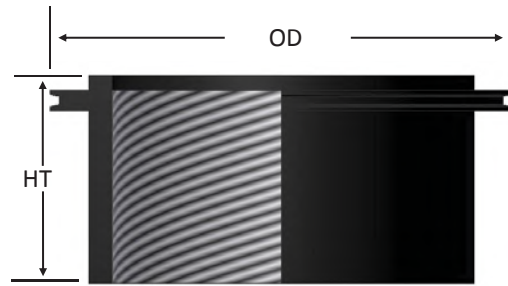
Element Part Number		Rated Flow SCFM	Surface Area ft ²		Dimensions - inches			STD Endcap
Polyester	Paper		Polyester	Paper	ID	OD	HT	Features
09	08	15	0.25	0.45	1 1/8	2 1/4	2 1/4	M
21NP	-	80	1.7		2 3/8	4 1/4	4 3/4	M
25	24	105	2.0	4.7	3 5/8	5 7/8	4	M
-	80P	175		7.1	4 1/8	7 7/8	3	M
-	84P	255		10	4 1/8	7 7/8	4	M
45P	44P	430	6.9	17	6	9 3/4	4 3/4	GN M
-	144P	560		20	6	9 3/4	5 13/16	GN
75P	74P	560		21	8	11 3/4	5	GN M
371P	370P	1800	22	72	10	13 3/4	14 1/2	GN
391	390	5500	100	275	22 1/4	27 7/8	14 1/2	GN
491	490	8000	145	350	22 1/4	27 7/8	21 1/2	GN
575P	-	2500	84		8	11 3/4	24 1/2	GN
-	100	50		2.3	1 1/4	3 7/8	2 3/4	M
-	101	120		5.7	4 1/2	6 5/8	5 1/8	M
-	102	85		3.3	5 11/16	7 3/4	3	M
-	104	150		7.1	5 1/8	7 1/4	5 3/8	M
-	108	60		3.0	3 5/8	5 3/4	2 3/4	M
-	109	170		6.8	5 5/8	7 3/4	4	M
-	127	35		1.0	3	4 3/8	2 1/8	M

See Element Technical Data section for maintenance guidelines.

Note: Model offerings and design parameters may change without notice. See www.solbergmfg.com for most current offering.

Hockey Puck Elements

3 - 250 SCFM Flow Range



Features

- High grade filter element
- Element construction of injection molded thermoplastic
- Integrated gasket seal
 - Positive seal between housing hemispheres
 - New seal with each element
 - Minimizes parts
- Optimal surface area per given size
- Pleated media for high dirt holding capacity

Technical Specifications

- Temp (continuous): min -15°F (-26°C), max 220°F (104°C)
- Filter change out differential: 15-20" H₂O over initial Δ P
- Polyester: 99+% removal efficiency standard to 25 micron
- Paper: 99+% removal efficiency standard to 2 micron

Options

- Contact factory

Polyester Media Benefits/Specs

- Less maintenance due to longer durability
- Moisture resistant
- Handles hot air and oil mist from unload cycle of reciprocating/piston compressor
- Washable with lukewarm water and mild detergent
(Replacing element is recommended)

Paper Media Benefits/Specs

- Heavy duty industrial strength paper
- Cost effective
- Gently blow out media
(Replacing element is recommended)

Element Part Number		Element SCFM Rating	Surface Area ft ²	Dimensions - inches	
Polyester	Paper			OD	HT
03	02	3	0.1	1 1/2	1
05	04	8	0.2	2 1/4	1
07	06	12	0.58	3	1 3/8
11	10	35	1.1	4	1 3/8
17*	16	250	8	8	3 1/4

* = Minimum order quantity applies
See Element Technical Data section for maintenance guidelines

Tidbit: Charlie Solberg Jr. created a patented process to manufacture our Hockey Puck Style Filter Elements.

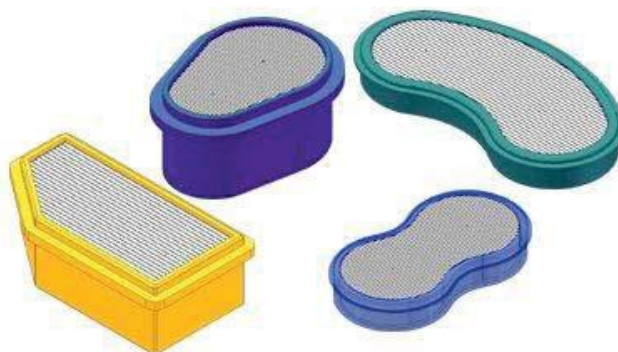
Note: Model offerings and design parameters may change without notice. See www.solbergmfg.com for most current offering.

Custom Configurations For Hockey Puck Style Elements

- Contact Solberg for custom configurations that fit your equipment or application
- High grade filter element
- Multiple molding material options
- Integrated gasket seal
- Tooling and production minimums may apply

Applications

- Small engines
- Industrial equipment
- Vacuum cleaners
- DIY equipment
- Contact Solberg about your unique application



Sample Configurations

Disposable Filter Elements

AKG Series “Slip Fit” Elements

Features

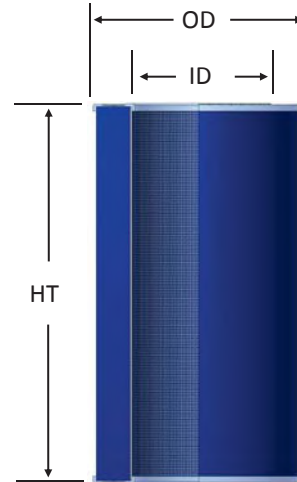
- Molded plastisol slip-fit connection
- Less maintenance with disposable element
- Pleated media for high dirt holding capacity

Technical Specifications

- Temp (continuous): min -15°F (-26°C), max 220°F (104°C)
- Filter change out differential: 15-20" H₂O over initial ΔP
- Polyester: 99+% removal efficiency standard to 5 micron
- Paper: 99+% removal efficiency standard to 2 micron



Oil Mist Coalescing Elements/ Air Separator Elements



Features

- Reinforced with epoxy coated steel wire
- Metal support on both sides of media

Benefits

- High efficiency at low pressure drop
- Increased surface area in a given volume allows for low velocity separation of ultra-fine oil mists
- Low oil carryover

Technical Specifications

- 0.3 micron media; 99.97% efficiency
- Continuous operating temp: 68°F (20°C) - 180°F (80°C)

Feature Identification

- M = Molded plastisol endcap
- B = Endcaps have closed one end with bolt hole, open on other end
- G = Galvanized metal endcaps
- C = Closed one end, open on other end
- D = Element with molded open end, metal closed
- W = Wrapped coalescing media
- P = Pleated coalescing media

Element Part Number	Element SCFM Rating	Dimensions - inches			Features
		ID	OD	HT	
FG3	4	1 1/4	2 1/4	2 1/8	MW
FG5	5	1 1/4	2 1/4	3	MW
FG7	7	1 1/4	2 1/4	4	MW
FG9	16	3	4	4	MW
FG10	24	3	4	6	MW
FG11	30	3 7/8	5	4 1/4	MW
FG20	44	8	9	4 3/4	MW
GL910	4	1/2	1 13/16	1 7/16	DW
GL915	10	3/4	2 5/16	2 3/8	DW
PSG925	20	1 1/2	3	4 7/8	GBP
PSG848	50	2 9/16	5	4 3/4	GP
PSG850/1	125	3 1/2	5 7/8	8 3/4	GBP
PSG145	175	2 9/16	5	14 1/4	GP
PSG860/1	200	3 1/2	5 7/8	14	GBP
PSG244/2	300	6	9 3/4	9 5/8	GBP
PSG344/2	500	6	9 3/4	14 1/8	GBP
PSG374/2	800	8	11 3/4	14 1/8	GBP
PSG474/2	1100	8	11 3/4	21 1/2	GBP
PSG476	1800	9	14 5/8	21 1/2	GP

Note: Model offerings and design parameters may change without notice. See www.solbergmfg.com for most current offering.

Operating Principle

Intake air is drawn through the angled louver plates which direct to turn the rotor. The centrifugal force separates the particulate contaminants from the airstream, throwing them to the outer perimeter of the cover, expelling them through the discharge port. Clean air then enters into your equipment.

General Specifications

- Temp (continuous): min -60°F (-51°C) max 250°F (121°C)
- 85%+ removal efficiency standard to 15 microns
- Heavy duty vibration resistant stainless steel clamp

Molded SpinMeisters™

- Molded fiber filled composite housing
- Plastic rotors
- May be used with Solberg Inlet SpinMeister™ Filter Assemblies

Part Number	SCFM Flow Rating Range	Slip Fit Outlet	Dimensions - inches		
			HT	Slip Fit I.D.	Cover O.D.
SM-1.5	3-35	1.5"	2 1/4	1 1/2	3 1/2
SM-2	20-110	2"	3	2	4 3/4
SM-3	75-250	3"	4 1/2	3	7
SM-4	250-400	4"	5 3/8	4	9 3/8
SM-6	450-900	6"	7 1/4	6	12

Aluminum SpinMeisters™

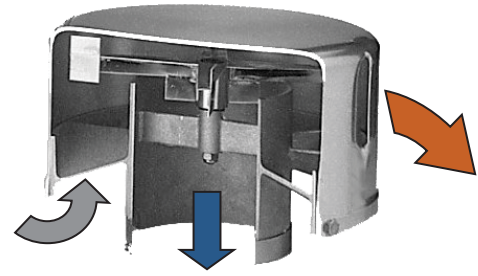
- Polished aluminum housing
- Stainless steel rotors
- May be used with Solberg Inlet SpinMeister™ Filter Assemblies

Part Number	SCFM Flow Rating Range	Slip Fit Outlet	Dimensions - inches		
			HT	Slip Fit I.D.	Cover O.D.
SMA-2	10-110	2"	3	2	4 3/4
SMA-3	140-300	3"	4 3/4	3	8 1/4
SMA-4	140-350	4"	4 3/4	4	8 1/4
SMA-6	400-850	6"	7 1/8	6	10 5/8
SMA-9	900-2000	9"	8 1/8	9	17 1/8

SpinMeisters™ for Vacuum

- Low pressure drop design
- Molded fiber filled composite housing
- Stainless steel rotors
- May be used with Solberg Vacuum Filter Series

Part Number	SCFM Flow Rating Range	Slip Fit Outlet	Dimensions - inches		
			HT	Slip Fit I.D.	Cover O.D.
SML235	40-110	3.5"	3 7/8	3 1/2	7 3/8
SML345	100-200	4.5"	7	4 1/2	10 1/4
SML445	200-450	4.5"	7 1/2	4 1/2	10 1/4



SpinMeister™ Airflow Schematic



Element Reference Chart

Standard Polyester / Paper



Solberg Part Number	Dimensions			Media Type	SCFM Rating	Endcap Features	Reference Number	Reference Number	Catalog Page
	OD	ID	HT						
800	1 1/8	3/8	1 3/16	Paper	3	GB	C31		6-9
802	1 1/8	3/8	1 1/2	Paper	5	GB	C31/1		6-9
804	1 1/8	3/8	2 7/16	Paper	9	GB	C32		6-9
808	1 1/2	1/2	1 1/8	Paper	4	GB	C42/2		6-9
806	1 1/2	1/2	1 1/2	Paper	8	GB	C42/1		6-9
812	1 1/2	1/2	1 1/2	Paper	8	GC	C44		6-9
810	1 1/2	1/2	2 7/16	Paper	13	GB	C43		6-9
854	1 1/2	1/2	5 5/16	Paper	27	GB	C411		6-9
03	1 1/2	---	1	Polyester	3	M			6-12
02	1 1/2	---	1	Paper	3	M			6-12
870	1 15/16	1 1/8	5 5/8	Paper	30	GB	C69/1		6-9
09	2 1/4	1 1/8	2 1/4	Polyester	30	M			6-11
08	2 1/4	1 1/8	2 1/4	Paper	30	M			6-11
05	2 1/4	---	1	Polyester	8	M			6-12
04	2 1/4	---	1	Paper	8	M			6-12
814	2 5/16	11/16	1 9/16	Paper	13	GB	C64/1		6-9
816	2 5/16	11/16	1 9/16	Paper	13	GC	C64/3		6-9
821	2 5/16	11/16	2	Polyester	18	GB	C66/1		6-9
820	2 5/16	11/16	2	Paper	18	GB	C66/1		6-9
818	2 5/16	11/16	2 7/16	Paper	20	GB	C66		6-11
830	2 1/2	1	2 7/8	Paper	24	GB	C79/1		6-9
828	2 1/2	1 1/2	1 3/4	Paper	12	GC	C76/2		6-9
825	2 1/2	1 1/2	2 11/16	Polyester	25	GC	C75		6-9
824	2 1/2	1 1/2	2 11/16	Paper	25	GC	C75		6-9
832	2 1/2	1 1/2	2 11/16	Paper	19	GCF	C79/2		6-9
826	2 1/2	1 1/2	2 13/16	Paper	20	GCF	C75/2		6-9
872	2 1/2	1 1/2	2 13/16	Paper	24	GBF	C75/2		6-9
827	2 1/2	1 1/2	2 13/16	Polyester	20	GCF	C75/2		6-9
834	2 1/2	1 1/2	4 1/2	Paper	40	GBHF	C713		6-9
836	2 1/2	1 1/2	6 9/16	Paper	48	GBHF	C718		6-9
852	2 11/16	1 1/2	2 3/4	Paper	24	GC	C711/1		6-9
07	3	---	1 3/8	Polyester	12	M			6-12
06	3	---	1 3/8	Paper	12	M			6-12
838	3 5/16	2 3/8	2 3/4	Paper	30	GCF	C912		6-9
841	3 5/8	1 3/4	5 5/8	Polyester	80	G	C1049		6-9
840	3 5/8	1 3/4	5 5/8	Paper	80	G	C1049		6-9
868	3 11/16	2 3/8	2 15/16	Paper	25	M			6-9
100	3 7/8	1 1/4	2 3/4	Paper	85	M			6-11
843	3 7/8	2 3/8	2 3/4	Polyester	55	G	C1112		6-9
842	3 7/8	2 3/8	2 3/4	Paper	55	G	C1112		6-9
845	3 7/8	2 3/8	2 3/4	Polyester	55	GCF	C1112/2		6-9
844	3 7/8	2 3/8	2 3/4	Paper	55	GCF	C1112/2		6-9
847	3 7/8	2 3/8	3 15/16	Polyester	62	G	C1132		6-9
846	3 7/8	2 3/8	3 15/16	Paper	62	G	C1132		6-9
897	4	2 3/8	8 7/16	Polyester	80	GB			6-9
896	4	2 3/8	8 7/16	Paper	80	GB			6-9
11	4	---	1 3/8	Polyester	35	M			6-12
10	4	---	1 3/8	Paper	35	M			6-12
15P	4 3/8	3	2 5/16	Polyester	35	M			6-7
14P	4 3/8	3	2 5/16	Paper	35	M			6-7
19P	4 3/8	3	4 3/4	Polyester	100	M			6-7
18P	4 3/8	3	4 3/4	Paper	100	M			6-7
127	4 3/8	3	2 1/8	Paper	60	M			6-11
849	5	2 9/16	4 3/4	Polyester	115	G	C1337		6-9
848	5	2 9/16	4 3/4	Paper	115	G	C1337		6-9
879	5	2 9/16	4 3/4	Polyester	115	GB			6-9
878	5	2 9/16	4 3/4	Paper	115	GB			6-9
108	5 3/4	3 5/8	2 3/4	Paper	105	M			6-11
31P	5 3/4	3 5/8	4 3/4	Polyester	195	M			6-7
30P	5 3/4	3 5/8	4 3/4	Paper	195	M			6-7
231P	5 3/4	3 5/8	9 1/2	Polyester	300	M			6-7
230P	5 3/4	3 5/8	9 1/2	Paper	300	M			6-7
32-01	5 13/16	4	2	Polyester	---	M	81-1202		6-11
32-00	5 13/16	4	2	Paper	---	M	81-0470		6-11
859	5 7/8	3 1/2	4 7/8	Polyester	110	G	C1574		6-9
858	5 7/8	3 1/2	4 7/8	Paper	110	G	C1574		6-9
851	5 7/8	3 1/2	8 3/4	Polyester	290	GR	C15124/1		6-9
851/1	5 7/8	3 1/2	8 3/4	Polyester	290	GBR	C15124/1		6-9
850	5 7/8	3 1/2	8 3/4	Paper	290	GR	C15124/1		6-9
850/1	5 7/8	3 1/2	8 3/4	Paper	290	GBR	n/a		6-9
25	5 7/8	3 5/8	4	Polyester	180	M			6-11
24	5 7/8	3 5/8	4	Paper	180	M			6-11
32-03	6	4 1/4	2 1/2	Polyester	---	M	81-1203	F642	6-11
32-02	6	4 1/4	2 1/2	Paper	---	M	81-0471	P642	6-11

Endcap Information

- B = Closed one end w/bolt hole
- C = Closed one end
- E = EPDM gasket
- F = Felt gaskets on open endcaps
- G = Galvanized metal endcaps
- H = Felt gasket on bolt hole
- I = Injection molded thermoplastic
- M = Molded plastisol
- N = Neoprene blended gasket on open endcaps
- R = Mixed rubber/cork gasket on open endcaps



Solberg Part Number	OD	Dimensions		Media Type	SCFM Rating	Endcap Features	Reference Number	Reference Number	Catalog Page
		ID	HT						
101	6 5/8	4 1/2	5 1/8	Paper	205	M			6-11
32-17	6 7/8	4 3/4	4 3/16	Polyester	---	M	F8-151		6-11
32-16	6 7/8	4 3/4	4 3/16	Paper	---	M	F8-108		6-11
104	7 1/4	5 1/8	5 3/8	Paper	255	M			6-11
109	7 3/4	5 5/8	4	Paper	290	M			6-11
102	7 3/4	5 11/16	3	Paper	145	M			6-11
237	7 3/4	4 11/16	8 1/2	Polyester	550	GBN			6-7
236	7 3/4	4 2/3	8 1/2	Paper	550	GBN			6-7
80P	7 7/8	4 1/8	3	Paper	300	M			6-11
84P	7 7/8	4 1/8	4	Paper	435	M			6-11
35P	7 7/8	4 3/4	4 13/16	Polyester	275	M			6-7
34P	7 7/8	4 3/4	4 13/16	Paper	275	M			6-7
235P	7 7/8	4 3/4	9 3/8	Polyester	570	M			6-7
234P	7 7/8	4 3/4	9 3/8	Paper	570	M			6-7
335P	7 7/8	4 3/4	14 1/2	Polyester	800	M			6-7
334P	7 7/8	4 3/4	14 1/2	Paper	800	M			6-7
17	8	---	3 1/4	Polyester	250	M			6-12
16	8	---	3 1/4	Paper	250	M			6-12
863	8 3/8	5 11/16	6 7/16	Polyester	322	M	C21138/1		6-9
862	8 3/8	5 11/16	6 7/16	Paper	322	M	C21138/1		6-9
874	8 1/2	6	3 1/2	Paper	180	GCE			6-9
239P	9 1/4	4 7/8	10	Polyester	570	GBN			6-7
238P	9 1/4	4 7/8	10	Paper	570	GBN			6-7
45P	9 3/4	6	4 3/4	Polyester	735	GN			6-11
44P	9 3/4	6	4 3/4	Paper	735	M			6-11
144P	9 3/4	6	5 13/16	Paper	955	GN			6-11
245P	9 3/4	6	9 5/8	Polyester	880	GN			6-7
244P	9 3/4	6	9 5/8	Paper	880	M			6-7
345P	9 3/4	6	14 1/2	Polyester	1100	GN			6-7
344P	9 3/4	6	14 1/2	Paper	1100	GN			6-7
32-05	9 3/4	7 1/4	4	Polyester	---	M	81-1204	F974	6-11
32-04	9 3/4	7 1/4	4	Paper	---	M	81-0472	P974	6-11
32-07	9 3/4	7 1/4	6	Polyester	---	M	81-1205	F976	6-11
32-06	9 3/4	7 1/4	6	Paper	---	M	81-1063	P976	6-11
857	10	7 11/16	7 11/16	Polyester	375	G	C26240		6-9
856	10	7 11/16	7 11/16	Paper	375	G	C26240		6-9
32-19	10 3/16	7 1/8	5 1/8	Polyester	---	M	F8-135		6-11
32-18	10 3/16	7 1/8	5 1/8	Paper	---	M	F8-109		6-11
32-09	11 1/2	9 7/8	7	Polyester	---	M	81-1206	F1197	6-11
32-08	11 1/2	9 7/8	7	Paper	---	M	81-0474	P1197	6-11
75P	11 3/4	8	5	Polyester	955	GN			6-11
74P	11 3/4	8	5	Paper	955	GN			6-11
275P	11 3/4	8	9 5/8	Polyester	1100	GN			6-7
274P	11 3/4	8	9 5/8	Paper	1100	GN			6-7
375P	11 3/4	8	14 1/2	Polyester	1500	GN			6-7
374P	11 3/4	8	14 1/2	Paper	1500	GN			6-7
575P	11 3/4	8	24 1/2	Polyester	2500	GN			6-11
32-21	12 9/16	9 1/2	4 7/8	Polyester	---	M	F8-134		6-11
32-20	12 9/16	9 1/2	4 7/8	Paper	---	M	F8-110		6-11
32-23	12 9/16	9 1/2	10	Polyester	---	M	F8-139		6-11
32-22	12 9/16	9 1/2	10	Paper	---	M	F8-111		6-11
32-11	13 5/8	11 5/8	8 5/8	Polyester	---	M	81-1207	F13118	6-11
32-10	13 5/8	11 5/8	8 5/8	Paper	---	M	81-0475	P13118	6-11
371P	13 3/4	10	14 1/2	Polyester	1800	GN			6-11
370P	13 3/4	10	14 1/2	Paper	1800	GN			6-11
571P	13 3/4	10	24 1/2	Polyester	1610	GN			6-11
377P	14 5/8	9	14 1/2	Polyester	1825	GN			6-7
376P	14 5/8	9	14 1/2	Paper	1825	GN			6-7
32-13	17	13	10	Polyester	---	M	81-1209	F171310	6-11
32-12	17	13	10	Paper	---	M	81-1163	P171310	6-11
385P	19 5/8	14	14 1/2	Polyester	3300	GN			6-7
384P	19 5/8	14	14 1/2	Paper	3300	GN			6-7
485P	19 5/8	14	21 1/2	Polyester	4705	GN			6-7
484P	19 5/8	14	21 1/2	Paper	4705	GN			6-7
685P	19 5/8	14	28 1/2	Polyester	6600	GN			6-7
32-25	19 3/4	15	14	Polyester	---	M	F8-148		6-11
32-24	19 3/4	15	14	Paper	---	M	F8-137		6-11
32-15	23	19	14	Polyester	---	M	81-1210	F231914	6-11
32-14	23	19	14	Paper	---	M	81-1164	P231914	6-11
391	27 7/8	22 1/4	14 1/2	Polyester	5500	GN			6-11
390	27 7/8	22 1/4	14 1/2	Paper	5500	GN			6-11
491	27 7/8	22 1/4	21 1/2	Polyester	8000	GN			6-11
490	27 7/8	22 1/4	21 1/2	Paper	8000	GN			6-11

Note: Model offerings and design parameters may change without notice. See www.solbergmfg.com for most current offering.

Useful Vacuum Formulas

1. SCFM to ACFM: $SCFM \times (P_1 \div P_2) = ACFM$
2. ACFM to SCFM: $ACFM \times (P_2 \div P_1) = SCFM$
3. SCFM to ACFM (w/temp)..... $SCFM \times (P_1 \div P_2) \times (T_2 \div T_1) = ACFM$
4. ACFM to ACFM: $ACFM \times (P_1 \div P_2) = ACFM$ (adjusted)
5. Closed System: $S = 2.3 \times (V \div T) \times \log(P_1 \div P_2)$ [solve for Capacity]
 $T = 2.3 \times (V \div S) \times \log(P_1 \div P_2)$ [solve for Time]
6. Receiver Size (V2): $V_2 = V_1 \times (P_1 - P_3) \div (P_3 - P_2)$
7. Leak Rate Capacity: $S = V \times (P_2 - P_1) \div t \times (1 \div P_1)$
8. Lbs./Hour to ACFM: $S = (Lbs. \div 60) \times (385 \div MW) \times (760 \div P_2) \times ((460 + T) \div 528)$
9. Surface Area of a Pipe: $3.1416 \times r \times r$ (radius should be in feet)
10. Face Velocity: $F.V. \text{ (in ft./min)} = S/ACFM \div \text{Sq. Feet of Media}$
11. Velocity (Pipe): $\text{Velocity (in ft/min)} = ACFM \div \# \text{ of FT}^2 \text{ (Pipe I.D.)}$
12. Deg. F to Deg. Rankine: $\text{Deg. F} + 460 = \text{Deg. R}$
13. Deg. Rankine to Deg. F: $\text{Deg. R} - 460 = \text{Deg. F}$
14. Deg. Rankine to Deg. K: $\text{Deg. R} \times 0.556 = \text{Deg. K}$
15. Deg. Kelvin to Deg. R: $\text{Deg. K} \times 1.8 = \text{Deg. R}$
16. Deg. C to Deg. Kelvin: $\text{Deg. C} + 273.15 = \text{Deg. K}$
17. Deg. F to Deg. C: $(\text{Deg. F} - 32) \times 5 \div 9 = \text{Deg. C}$
18. Deg. C to Deg. F: $(\text{Deg. C} \times 9 \div 5) + 32 = \text{Deg. F}$

Legend

ACFM = Actual CFM	r = radius
C = Centigrade	S= Capacity in ACFM
F = Fahrenheit	SCFM = Standard CFM
K = Kelvin	t = Time
MW = Molecular Weight	T ₁ = Initial Temp.
P ₁ = Initial Pressure	T ₂ = Target Temp.
P ₂ = Target Pressure	V= Volume in Cubic Feet
P ₃ = Avg. Pressure	V ₂ = Receiver Volume
R= Rankine	



Useful Conversions

From	Multiply By:	To Get:	From	Multiply By:	To Get:	From	Multiply By:	To Get:	From	Multiply By:	To Get:
ATM's	1.013	Bar	C.Meters/hr.	16,667	cc's/Minute	Kgs/Sq. Cent.	980.7	Millibar	Millibar	0.0009869	ATM's
ATM's	76	cm Hg	C.Meters/hr.	277.8	cc's/Second	Kgs/Sq. Cent.	10,000	mm H ₂ O	Millibar	0.001	Bar
ATM's	33.9	Feet H ₂ O	C.Meters/hr.	0.589	CFM	Kgs/Sq. Cent.	98,069	Pascals	Millibar	0.075	cm's Hg
ATM's	29.92	"HgA	C.Meters/hr.	0.01667	C.Meters/min.	Kgs/Sq. Cent.	2048.2	lbs/sq. foot	Millibar	0.03346	Ft H ₂ O
ATM's	406.8	"H ₂ O	C.Meters/hr.	0.000278	C.Meters/sec.	Kgs/Sq. Cent.	14.22	lbs/sq. inch	Millibar	0.02953	"HgA
ATM's	1.0332	Kgs/sq. cm	C.Meters/hr.	4.403	Gallons/Minute	Kgs/Sq. Cent.	735.6	Torr (mm Hg)	Millibar	0.4015	"H ₂ O
ATM's	10,332	Kgs/sq. Meter	C.Meters/hr.	16.667	Liters/Minute	Kgs/Sq. Meter	0.007356	cm's Hg	Millibar	0.00102	Kgs/sq. cm
ATM's	101.325	Kilopascals	C.Meters/hr.	0.2778	Liters/Second	Kgs/Sq. Meter	0.003281	Feet H ₂ O	Millibar	10.2	Kgs/sq. Meter
ATM's	760,000	Microns	C.Meters/min.	1,000,000	cc's/Minute	Kgs/Sq. Meter	0.002896	"HgA	Millibar	0.1	Kilopascals
ATM's	1013	Millibar	C.Meters/min.	16,667	cc's/Second	Kgs/Sq. Meter	0.03937	"H ₂ O	Millibar	750	Microns
ATM's	10,332	mm H ₂ O	C.Meters/min.	35.31	CFM	Kgs/Sq. Meter	0.0001	Kgs/sq. cm	Millibar	10.2	mm H ₂ O
ATM's	101,325	Pascals	C.Meters/min.	60	C.Meters/hr.	Kgs/Sq. Meter	73.56	Microns	Millibar	100	Pascals
ATM's	2,116.2	lbs/sq. foot	C.Meters/min.	0.01667	C.Meters/sec.	Kgs/Sq. Meter	0.09804	Millibar	Millibar	2.089	lbs/sq. foot
ATM's	14.7	lbs/sq. inch	C.Meters/min.	264.17	Gallons/Minute	Kgs/Sq. Meter	1	mm H ₂ O	Millibar	0.0145	lbs/sq. inch
ATM's	760	Torr (mm Hg)	C.Meters/min.	1,000	Liters/Minute	Kgs/Sq. Meter	9.807	Pascals	Millibar	0.7501	Torr (mm Hg)
Bar	0.9869	ATM's	C.Meters/min.	60,000	Liters/Second	Kgs/Sq. Meter	0.2048	lbs/sq. foot	Millimeters	0.1	Centimeters
Bar	75	cm's Hg	Gallons	3,785.4	Cub. Cm's	Kgs/Sq. Meter	0.001422	lbs/sq. inch	Millimeters	0.003281	Feet
Bar	33.46	Feet H ₂ O	Gallons	0.1337	Cubic Feet	Kgs/Sq. Meter	0.07356	Torr (mm Hg)	Millimeters	0.03937	Inches
Bar	29.528	"HgA	Gallons	231	Cubic Inches	Kilopascals	0.009869	ATM's	Millimeters	0.001	Meters
Bar	401.48	"H ₂ O	Gallons	0.003785	Cubic Meters	Kilopascals	0.01	Bar	Millimeters	1,000	Microns
Bar	1.02	Kgs/sq. cm	Gallons	0.004951	Cubic Yards	Kilopascals	0.75	cm's Hg	Millimeters	0.001094	Yards
Bar	10,196.9	Kgs/sq. Meter	Gallons	3.79	Liters	Kilopascals	0.335	Feet H ₂ O	Pascals	0.00009869	ATM's
Bar	100	Kilopascals	Gallons	128	Ounces (fluid)	Kilopascals	0.2953	"HgA	Pascals	0.00001	Bar
Bar	750,000	Microns	Gallons	8	Pints	Kilopascals	4.015	"H ₂ O	Pascals	0.0007501	cm's Hg
Bar	1,000	Millibar	Gallons	4	Quarts	Kilopascals	0.0102	Kgs/sq. cm	Pascals	0.003346	Feet H ₂ O
Bar	10,196.9	mm H ₂ O	Gallons/Minute	3,785.4	cc's/Minute	Kilopascals	101.97	Kgs/sq. Meter	Pascals	0.0002953	"HgA
Bar	100,000	Pascals	Gallons/Minute	63.1	cc's/Second	Kilopascals	7,500.6	Microns	Pascals	0.004015	"H ₂ O
Bar	2,088.5	lbs/sq. foot	Gallons/Minute	0.1337	CFM	Kilopascals	10	Millibar	Pascals	0.0000102	Kgs/sq. cm
Bar	14.5	lbs/sq. inch	Gallons/Minute	0.2271	C.Meters/hr.	Kilopascals	101.97	mm H ₂ O	Pascals	0.102	Kgs/sq. Meter
Bar	750	Torr (mm Hg)	Gallons/Minute	0.00379	C.Meters/min.	Kilopascals	1,000	Pascals	Pascals	0.001	Kilopascals
cc's/Minute	0.01667	cc's/Second	Gallons/Minute	3.785	Liters/Minute	Kilopascals	20.89	lbs/sq. foot	Pascals	7.5	Microns
cc's/Minute	0.00003531	CFM	Gallons/Minute	0.0631	Liters/Second	Kilopascals	0.14504	lbs/sq. inch	Pascals	0.01	Millibar
cc's/Minute	0.000006	C.Meters/hr.	"HgA	0.03342	ATM's	Kilopascals	7.5	Torr (mm Hg)	Pascals	0.102	mm H ₂ O
cc's/Minute	0.000001	C.meters/min.	"HgA	0.03387	Bar	Liters	1,000	Cub. Cm's	Pascals	1	Newtons/M ²
cc's/Minute	0.000264	Gallons/Minute	"HgA	2.54	cm's Hg	Liters	0.03531	Cubic Feet	Pascals	0.0209	lbs/sq ft
cc's/Minute	0.001	Liters/Minute	"HgA	1.133	Feet H ₂ O	Liters	61.02	Cubic Inches	Pascals	0.000145	lbs/sq. inch
cc's/Minute	0.00001667	Liters/Second	"HgA	13.6	"H ₂ O	Liters	0.001	Cubic Meters	Pascals	0.007501	Torr (mm Hg)
Cub. Cm's	0.00003531	Cubic Feet	"HgA	0.0345	Kgs/sq. cm	Liters	0.001308	Cubic Yards	lbs/sq. inch	0.06805	ATM's
Cub. Cm's	0.06102	Cubic Inches	"HgA	345.32	Kgs/sq. Meter	Liters	0.2642	Gallons	lbs/sq. inch	0.06895	Bar
Cub. Cm's	0.000001	Cubic Meters	"HgA	3.387	Kilopascals	Liters	33.81	Ounces (fluid)	lbs/sq. inch	5.171	cm's Hg
Cub. Cm's	0.0002642	Gallons	"HgA	25,400	Microns	Liters	2.11	Pints	lbs/sq. inch	2.31	Feet H ₂ O
Cub. Cm's	0.001	Liters	"HgA	33.87	Millibar	Liters	1.057	Quarts	lbs/sq. inch	2.036	"HgA
Cub. Cm's	0.033814	Ounces (fluid)	"HgA	345.32	mm H ₂ O	Liters/Minute	1,000	cc's/Minute	lbs/sq. inch	27.68	"H ₂ O
Cub. Cm's	0.002113	Pints	"HgA	3,386.5	Pascals	Liters/Minute	16.67	cc's/Second	lbs/sq. inch	0.07031	Kgs/sq. cm
Cub. Cm's	0.001057	Quarts	"HgA	70.73	lbs/sq. foot	Liters/Minute	0.03531	CFM	lbs/sq. inch	703.1	Kgs/Sq. Meter
Cubic Feet	28,316.9	Cub. Cm's	"HgA	0.4912	lbs/sq. inch	Liters/Minute	0.06	C.Meters/hr.	lbs/sq. inch	6.895	Kilopascals
Cubic Feet	1,728	Cubic Inches	"HgA	25.4	Torr (mm Hg)	Liters/Minute	0.001	C.Meters/min.	lbs/sq. inch	51,715.1	Microns
Cubic Feet	0.02832	Cubic Meters	"H ₂ O	0.002458	ATM's	Liters/Minute	0.2642	Gallons/Minute	lbs/sq. inch	68.95	Millibar
Cubic Feet	0.03704	Cubic Yards	"H ₂ O	0.002491	Bar	Liters/Minute	0.01667	Liters/Second	lbs/sq. inch	703.1	mm H ₂ O
Cubic Feet	7.48	Gallons	"H ₂ O	0.01868	cm's Hg	Liters/Second	60,000	cc's/Minute	lbs/sq. inch	6,894.8	Pascals
Cubic Feet	28.32	Liters	"H ₂ O	0.0833	Feet H ₂ O	Liters/Second	1,000	cc's/Second	lbs/sq. inch	144	lbs/sq. foot
Cubic Feet	957.51	Ounces (fluid)	"H ₂ O	0.07355	"HgA	Liters/Second	2.119	CFM	lbs/sq. inch	51.71	Torr (mm Hg)
Cubic Feet	59.84	Pints	"H ₂ O	0.00254	Kgs/sq. cm	Liters/Second	3.6	C.Meters/hr.	Torr (mm Hg)	0.001316	ATM's
Cubic Feet	29.92	Quarts	"H ₂ O	25.4	Kgs/sq. Meter	Liters/Second	0.06	C.Meters/min.	Torr (mm Hg)	0.001333	Bar
CFM	28,317	cc's/Minute	"H ₂ O	0.2491	Kilopascals	Liters/Second	0.001	C.Meters/sec.	Torr (mm Hg)	0.1	cm's Hg
CFM	471.95	cc's/Second	"H ₂ O	1,868.2	Microns	Liters/Second	15.85	Gallons/Minute	Torr (mm Hg)	0.04461	Feet H ₂ O
CFM	1.699	C.Meters/hr.	"H ₂ O	2.491	Millibar	Liters/Second	60	Liters/Minute	Torr (mm Hg)	0.03937	"HgA
CFM	0.02832	C.meters/min.	"H ₂ O	25.4	mm H ₂ O	Microns	0.00001316	ATM's	Torr (mm Hg)	0.05353	"H ₂ O
CFM	0.000472	C.Meters/sec.	"H ₂ O	249.08	Pascals	Microns	0.00001333	Bar	Torr (mm Hg)	0.001359	Kgs/sq. cm
CFM	7.48	Gallons/Minute	"H ₂ O	5.202	lbs/sq. foot	Microns	0.0001	cm's Hg	Torr (mm Hg)	13.6	Kgs/sq. Meter
CFM	28.32	Liters/Minute	"H ₂ O	0.03613	lbs/sq. inch	Microns	0.00004461	Feet H ₂ O	Torr (mm Hg)	0.1333	Kilopascals
CFM	0.472	Liters/Second	"H ₂ O	1.868	Torr (mm Hg)	Microns	0.00003937	"HgA	Torr (mm Hg)	1,000	Microns
Cubic Meters	1,000,000	Cub. Cm's	Kgs/Sq. Cent.	0.9679	ATM's	Microns	0.0005353	"H ₂ O	Torr (mm Hg)	1.333	Millibar
Cubic Meters	35.31	Cubic Feet	Kgs/Sq. Cent.	0.9807	Bar	Microns	0.01359	Kgs/sq. Meter	Torr (mm Hg)	1	mmHg
Cubic Meters	61,023.7	Cubic Inches	Kgs/Sq. Cent.	73.56	cm's Hg	Microns	0.0001333	Kilopascals	Torr (mm Hg)	13.6	mmH ₂ O
Cubic Meters	1.308	Cubic Yards	Kgs/Sq. Cent.	32.81	Feet H ₂ O	Microns	0.001333	Millibar	Torr (mm Hg)	133.32	Pascals
Cubic Meters	264.17	Gallons	Kgs/Sq. Cent.	28.96	"HgA	Microns	0.01359	mm H ₂ O	Torr (mm Hg)	2.784	lbs/sq. foot
Cubic Meters	1,000	Liters	Kgs/Sq. Cent.	393.7	"H ₂ O	Microns	0.13333	Pascals	Torr (mm Hg)	0.01934	lbs/sq. inch
Cubic Meters	33,814	Ounces (fluid)	Kgs/Sq. Cent.	10,000	Kgs/sq. Meter	Microns	0.002784	lbs/sq. foot	Centigrade	°C + 273.15	Kelvin
Cubic Meters	2,113.38	Pints	Kgs/Sq. Cent.	98.07	Kilopascals	Microns	0.00001934	lbs/sq. inch	Fahrenheit	°F + 460	Rankine
Cubic Meters	1,056.7	Quarts	Kgs/Sq. Cent.	735,579	Microns	Microns	0.001	Torr (mm Hg)	Rankine	0.555	Kelvin



Notes



Notes

