

Replacement Elements - 800 Series

Small Vacuum Pumps 10 - 640 m³/hr 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 galvanized expanded metal O.D.
- 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°C (-15°F), max 104°C (220°F)
- Filter change out differential: 37-50 mbar over initial ΔP

Polyester Media Benefits/Specs

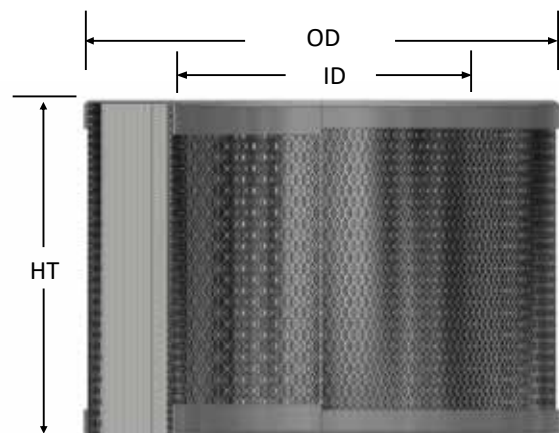
- Less maintenance due to longer durability
- Moisture resistant
- Handles hot air and oil mist from unload cycle of reciprocating/piston compressor
- Washable with lukewarm water and mild detergent*

Paper Media Benefits/Specs

- Cost effective
- Gently blow out media*

Endcap Construction

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



Paper Replacement Elements Solberg Part Number	Mann Ref Number	m ³ /hr Rating	Surface Area m ²	Dimensions - mm			Std. Endcap Features
				I.D.	O.D.	H.T.	
800	C31	10	0.013	10	30	30	GB
802	C31/1	10	0.020	10	30	37	GB
804	C32	20	0.033	10	30	62	GB
806	C42/1	15	0.031	13	38	37	GB
808	C42/2	10	0.017	13	38	29	GB
810	C43	25	0.051	13	38	61	GB
812	C44	15	0.031	13	38	38	GC
814	C64/1	25	0.051	18	59	39	GB
816	C64/3	25	0.051	18	59	39	GC
818	C66	35	0.083	18	59	61	GB
820	C66/1	35	0.071	18	59	52	GB
824	C75	43	0.085	38	65	67	GC
826	C75/2	43	0.085	38	65	71	GCF
828	C76/2	25	0.045	38	65	42	GC
830	C79/1	45	0.085	25	65	72	GB
832	C79/2	43	0.085	38	65	71	GCF
834	C713	70	0.14	38	65	120	GBHF
836	C718	85	0.17	38	65	171	GBHF
838	C912	55	0.11	60	83	69	GCF
840	C1049	140	0.33	45	93	141	G
842	C1112	95	0.16	60	98	69	G
844	C1112/2	95	0.17	60	98	73	GCF
846	C1132	110	0.25	60	98	101	G
848	C1337	200	0.46	65	127	122	G
850	C15124/1	493	1.2	89	149	221	GR
850/1	N/A	493	1.2	89	149	216	GBR
852	C711/1	45	0.090	38	67	70	GC
854	C411	50	0.10	13	38	129	GB
856	C26240	640	1.6	195	254	194	G
858	C1574	190	0.63	87	149	122	G
862	C21138/1	550	1.3	144	210	165	M
868	N/A	45	0.093	60	94	74	M
870	C69/1	55	0.11	29	49	143	GB
872	C75/2	45	0.086	38	65	71	GBF
874	N/A	-	-	152	216	86	GCE
878	N/A	200	0.46	65	127	122	GB
896	N/A	136	0.49	60	101	214	GB

Polyester Replacement Elements Solberg Part Number	Mann Ref Number	m ³ /hr Rating	Dimensions - mm			Std. Endcap Features
			I.D.	O.D.	H.T.	
821	C66/1	35	18	59	52	GB
825	C75	43	38	65	67	GC
827	C75/2	43	38	65	67	GCF
841	C1049	140	45	93	141	G
843	C1112	95	60	98	69	G
845	C1112/2	95	60	98	73	GCF
847	C1132	110	60	98	101	G
849	C1337	200	65	127	122	G
851	C15124/1	493	89	150	221	GR
851/1	N/A	493	89	150	216	GBR
857	C26240	637	192	254	194	G
859	C1574	187	89	149	122	G
863	C21138/1	550	146	210	165	M
879	N/A	200	65	127	122	GB
897	N/A	136	60	101	214	GB

*Replacing element is recommended.



Technical Data

Filter 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 replaced once the pressure drop reaches 37-50 mbar above the initial pressure drop of the installation. Cleaning an element is also an option. Solberg recommends replacing dirty elements for optimal performance. 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 37 mbar.

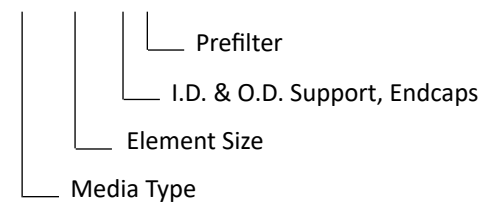
If the pressure drop exceeds 50 mbar at start-up, it should be replaced with a new element. With many types of equipment, the maximum pressure drop allowed will be dictated by the ability of the equipment to perform to its rated capacity. Under all circumstances, the operator should avoid exceeding the manufacturer's recommended maximum pressure drop for their specific equipment.

Request the appropriate maintenance manual for more in-depth information from your Solberg representative or through www.solbergmfg.com.

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.

HE234QP



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

GMAC Media: Activated Carbon, i.e. GMAC19

AA Media: Activated 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: EU6
- Temperature min: -26°C (-15°F), max: 104°C (220°F)

Advantages

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

Paper Element Features

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

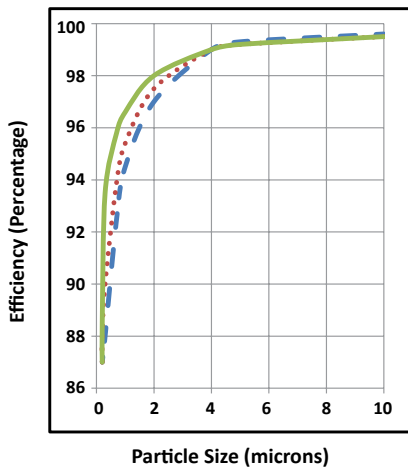
Technical Specifications

- 2 micron, 99+% efficiency
- Media classification: EU6
- Temperature min: -26°C (-15°F), max: 104°C (220°F)

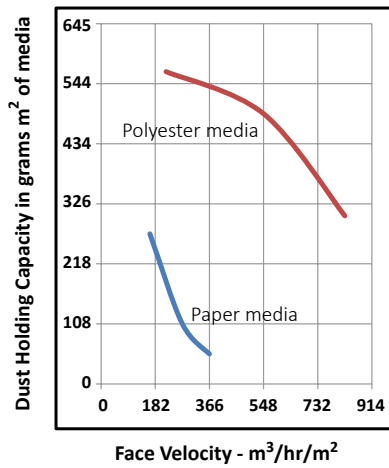
Advantages

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

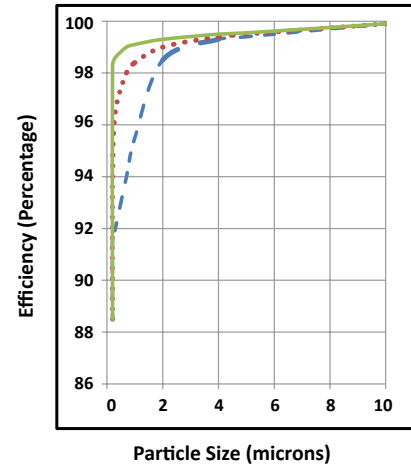
Polyester Media Efficiency



Face Velocity vs. Dust Holding Capacity



Paper Media Efficiency



Indicated Face Velocity:

- 275 m³/hr/m² media —————
- 550 m³/hr/m² media
- 825 m³/hr/m² media - - - - -

Indicated Face Velocity:

- 185 m³/hr/m² media —————
- 275 m³/hr/m² media
- 365 m³/hr/m² media - - - - -

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

