

Replacement Elements - Standard

60 - 13600 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
- 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*



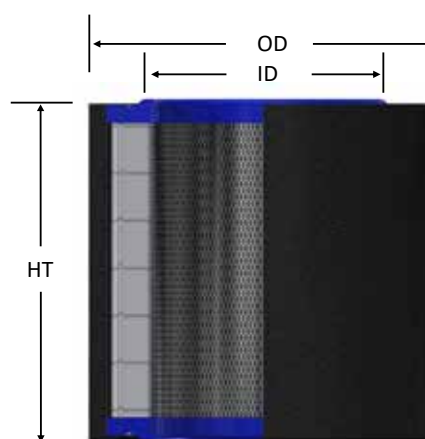
Paper Elements



Polyester Elements

Endcap Construction

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



Replacement Elements up to 510 m³/hr flow

Element Part Number		Element m ³ /hr Rating	Surface Area m ²		Dimensions - mm			Std. Endcap Features
Polyester	Paper		Polyester	Paper	I.D.	O.D.	H.T.	
15P™	14P™	60	0.05	0.10	76	111	59	M
19P®	18P™	170	0.14	0.28	76	111	122	M
31P™	30P™	335	0.21	0.58	92	146	124	M
35P	34P	470	0.37	1.02	121	200	123	M
231P™	230P™	510	0.42	1.10	92	146	241	M

Note: Also available in wire mesh. Example part number for wire mesh: 230S
See Element Technical Data for maintenance guidelines.

Replacement Elements up to 13600 m³/hr flow

Element Part Number		Element m ³ /hr Rating	Surface Area m ²		Dimensions - mm			Std. Endcap Features
Polyester	Paper		Polyester	Paper	I.D.	O.D.	H.T.	
237™	236	935	0.8	2.1	119	197	219	GBN
235P™	234P™	968	0.8	2.1	121	200	241	M
335P™	334P™	1360	1.1	3.2	121	200	361	M
239P™	238P™	968	1.2	4.5	123	234	267	GBN
2541	2540	1360	1.4	3.3	152	229	300	G
245P™	244P™	1500	1.3	3.3	152	248	245	GN M
345P™	344P™	1870	2.1	5.3	152	248	367	GN
275P™	274P™	1869	1.8	4.1	203	298	246	GN
375P™	374P™	2550	2.9	6.4	203	298	367	GN
377P™	376P™	3105	4.4	11	229	371	367	GN
385P™	384P™	5610	4.4	13.2	356	499	367	GN
391	390	9350	8.6	22.3	565	708	383	GN
485P™	484P™	8000	6.7	20.1	356	499	545	GN
491	490	13600	13.1	32.5	565	708	561	GN
685P™	--	11220	9	--	356	498	724	GN

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

Additional media available, contact factory or see Filter Media Specifications. See Element Technical Data for maintenance guidelines.

*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.

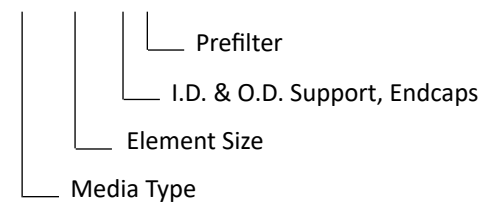
If the pressure drop exceeds 50 mbar at start-up, it should be replaced with a new element. With many types of equipment, the maximum pressure drop allowed will be dictated by the ability of the equipment to perform to its rated capacity. Under all circumstances, the operator should avoid exceeding the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

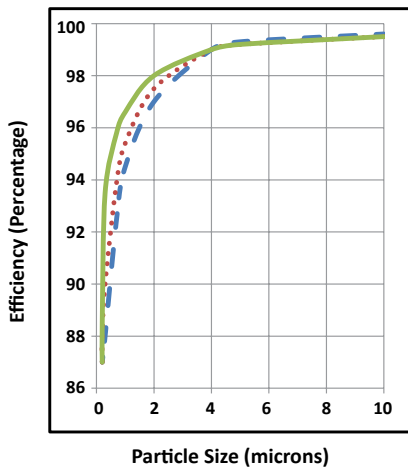
Technical Specifications

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

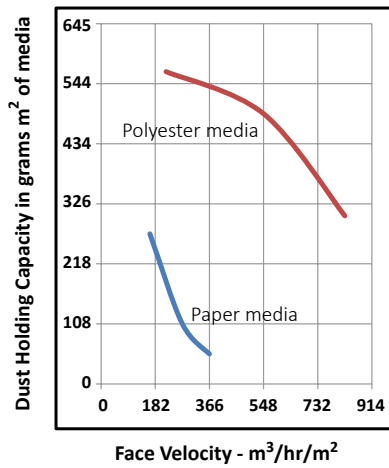
Advantages

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

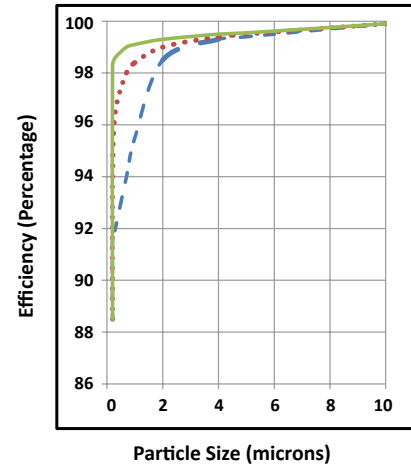
Polyester Media Efficiency



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.

