

# Replacement Elements - Hockey Puck

Small FS/PS 5 - 425 m<sup>3</sup>/hr 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 -26°C (-15°F) max 104°C (220°F)
- Filter change out differential: 37-50 mbar over initial ΔP
- Polyester: 99%+ removal efficiency standard to 10 micron
- Paper: 99%+ removal efficiency standard to 2 micron

## 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 m <sup>3</sup> /hr Rating	Surface Area m <sup>2</sup>	Dimensions - mm	
Polyester	Paper			O.D.	H.T.
03™	02™	5	0.009	40	25
05™	04™	14	0.019	60	25
07™	06™	20	0.054	78	35
11™	10™	60	0.10	102	37
17*	16™	425	0.74	191	83

\*Minimum order quantity applies.

See Element Technical Data for maintenance guidelines. Contact factory for options.

# 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.

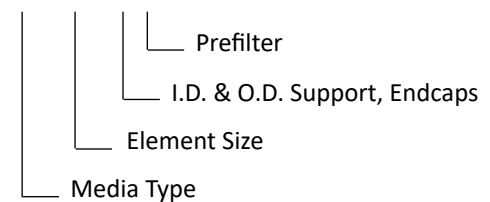
If the pressure drop exceeds 50 mbar at start-up, it should be replaced with a new element. With many types of equipment, the maximum pressure drop allowed will be dictated by the ability of the equipment to perform to its rated capacity. Under all circumstances, the operator should avoid exceeding the 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](http://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<sup>®</sup>, 235P<sup>™</sup>
- 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<sup>™</sup>

## 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<sup>™</sup>, 234P<sup>™</sup>
- 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<sup>™</sup>

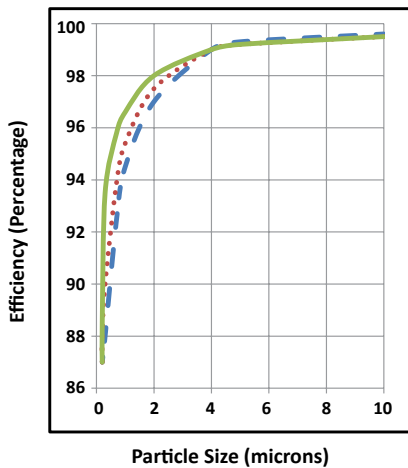
## Technical Specifications

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

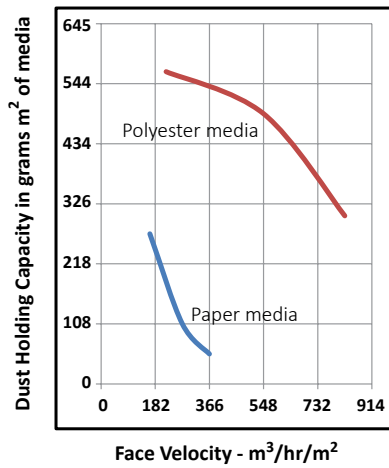
## Advantages

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

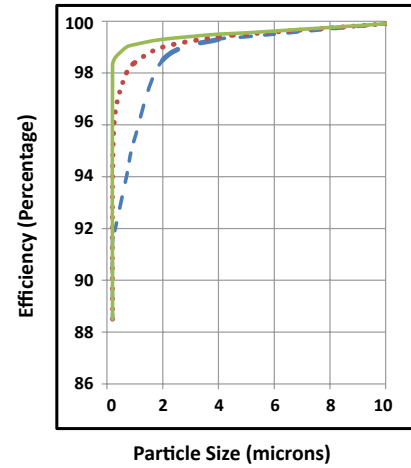
Polyester Media Efficiency



Face Velocity vs. Dust Holding Capacity



Paper Media Efficiency



Indicated Face Velocity:

- 275 m<sup>3</sup>/hr/m<sup>2</sup> media —————
- 550 m<sup>3</sup>/hr/m<sup>2</sup> media .....
- 825 m<sup>3</sup>/hr/m<sup>2</sup> media - - - - -

Indicated Face Velocity:

- 185 m<sup>3</sup>/hr/m<sup>2</sup> media —————
- 275 m<sup>3</sup>/hr/m<sup>2</sup> media .....
- 365 m<sup>3</sup>/hr/m<sup>2</sup> media - - - - -

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

