Atlas Copco



MPSC stainless steel pleated filter

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Product description

Introduction

MPSC filters provide reliable and efficient filtration for steam, high temperature or corrosive gases and liquids. Its pleated construction in combination with large surface area provides high dust holding capacity. It has an extended service life thanks to its robust construction and durable materials. It is fully welded with no adhesives or glues used.

Devices

MPSC filters are available in a wide range of scalable cartridges that allow for fast and easy scale-up of your production. From laboratory-scale filters to production-scale assemblies, all filters incorporate the same media and identical materials of construction, eliminating the need to requalify filter units as processes are scaled up.

Compatibility

The MPSC filter series are made entirely from stainless steel ensuring wide compatibility with a range of fluids and suitable for applications such as pre-filtration in water and other liquids and a broad chemical compatibility with a large number of solvents, acids and bases. A range of oring materials aids this. Due to the materials used, this provides compliance and suitability in food production and pharmaceutical uses, meeting the major regulations controlling contact materials.

Documentation

MPSC filters are designed, developed and manufactured in accordance with a ISO 9001 certified Quality Management System.

All the materials used comply with the European Union Regulation (EC) No. 1935/2004 as well as the Regulation (EU) No. 10/2011. concerning plastic materials and articles intended to come into contact with foodstuffs. These guidelines for plastics allow the use in food and beverage applications. All materials used meet the requirements of the CFR Title 21.



Key features

- High flow and low pressure drop
- Absolute retention rate (gas)
- Wide chemical compatibility
- Suitable for repeatable cleaning
- Regeneration by ultrasonic bath

Applications

Thanks to its chemical compatibility MPSC series filters are widely used in Food & Beverage, Pharmaceutical, Cosmetics and Chemical Industries.

- Steam, gases and liquids
- Culinary steam filtration
- High temperature gas and water filtration
- Oxidant and corrosive streams



Protecting process, products and people

Atlas Copco's process filters optimize your productivity while protecting your process, product and consumers. Our portfolio of cartridges and housings covers all your filtration needs. The products are made from proven, high quality materials from reputable suppliers and manufactured in a controlled environment subjected to strict QA/QC procedures.

Technical data

Micron ratings (µm)

1/5/25 μm

Cartridge length

10"/20"/30" + UF sizes (see configuration)

Cartridge diameter

42mm - 140mm

Material of construction

Filter media 316L Stainless steel
End caps 304 Stainless steel
Seal EPDM, Fluoraz

Maximum operating temperature

210°C (EPDM), 250°C (Fluoraz)

Maximum differential pressure forward (cartridges)

5.0 bar

Recommended changeout differential pressure

2.5 bar

Regulatory compliance

Indirect food additive

The product complies with food contact regulation 21 CFR §177 - 182 and (EC) No 1935/2004 and subsequent amendments

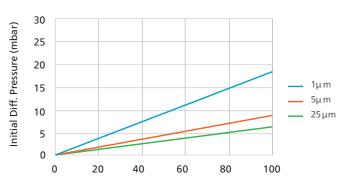
Quality assurance

For each filter cartridge an electronic Certificate of Conformity is available, detailing relevant information and product approvals against the specific batch number and part number for the filter. The filter cartridges are manufactured in a controlled environment.

Product purity

All MPSC series cartridges are free of surfactants, anti static agents, binders and adhesives.

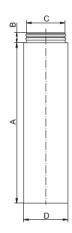
Flow rate



Note: 1030 cartridge tested with saturated steam @ 121°C/1 barg

Dimensions

| Size | A mm | B mm | C Inch | D mm | Correction factor |
|-----------|---------|---------|-----------|---------|-------------------|
| MPSC 0310 | 76 | 12 | 3/4" | 42 | 0,17 |
| MPSC 0410 | 104 | 12 | 3/4" | 42 | 0,28 |
| MPSC 0420 | 104 | 14 | 1" | 52 | 0,28 |
| MPSC 0520 | 104 | 14 | 1" | 52 | 0,33 |
| MPSC 0525 | 128 | 14 | 1" | 62 | 0,39 |
| MPSC 0530 | 128 | 16 | 2" | 86 | 0,45 |
| MPSC 0725 | 180 | 14 | 1" | 62 | 0,56 |
| MPSC 0730 | 180 | 16 | 2" | 86 | 0,67 |
| MPSC 1030 | 254 | 16 | 2" | 86 | 1,00 |
| MPSC 1530 | 381 | 16 | 2" | 86 | 1,56 |
| MPSC 2030 | 508 | 16 | 2" | 86 | 2,11 |
| MPSC 3030 | 762 | 16 | 2" | 86 | 3,28 |
| MPSC 3050 | 762 | 16 | 3″ | 140 | 4,34 |



Product configuration

Cartridges

| Series | Rating (µm) | Length | End cap | Seal |
|--------|-------------|-----------------|--------------------------------|-------------|
| MPSC | 1 | 10" / 20" / 30" | UF (UF plug in 2 oring) | E (EPDM) |
| | 5 | 0310 / 0410 | C7 (2x226 O-ring + 2 tabs/fin) | F (Fluoraz) |
| | 25 | 0420 / 0520 | | |
| | | 0525 / 0725 | | |
| | | 0730 / 1030 | | |
| | | 1530 / 2030 | | |
| | | 3030 / 3050 | | |

Example: MPSC 1µm 0310 UF E

