

111111

HIII

1181111

111111

111111

THE REPORT OF THE PARTY OF THE

**HHHM** 

IIIIIIII

111111

111111

**PFG-G** pleated glass fiber filters

# **PFG-G** pleated glass fiber filters

# **Product description**

### Introduction

PFG-G filters provide reliable, efficient and safe filtration of compressed air and nitrogen over an extended service life in Food & Beverage, Pharmaceutical and Chemical industries.

The cartridges feature multi-layers of glass microfiber media pleated with graded pore size from coarse (upstream) to fine (downstream) integrated with polypropylene support layers into a robust cage with core and reinforced end cap, making it suitable for demanding operating and cleaning conditions.

#### Devices

PFG-G 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

PFG-G filters are completely made from polypropylene hardware utilizing thermal welding techniques to seal all the components thus optimizing device integrity, thus assuring a broad chemical compatibility with a large number of solvents, acids and bases. Polypropylene is a highly chemically resistant material, If you chemically regenerate that element you will definitely destroy the glass fiber matrix!!! The all polypropylene construction guarantees a small extractable footprint.

#### Documentation

PFG-G filters are designed, developed and manufactured in accordance with a ISO 9001 certified Quality Management System. A Validation Guide is available for compliance with regulatory requirements.

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
- High dirt holding capacity
- Silicone and BPA free
- No fiber migration

#### Applications

Thanks to its chemical compatibility PFG-G filters are widely used in Food & Beverage, Pharmaceutical, Cosmetics and Chemical Industries. Compressed air and nitrogen

- Oil and water removal (coalescing)
- Pre filtration for final membrane filters
- Final filtration downstream desiccant dryers
- Tank venting
- Particle filtration in compressed air and venting applications



# **Technical data**

**Micron ratings (μm)** 0,3/0,8 μm

Cartridge length 5"/10"/20"/30"/40"

Cartridge diameter 68,5mm

Effective filtration area (typical) 0,33m<sup>2</sup>

Flow graph file path

Copy of Flow-dP rev,07 Gas

#### Material of construction

Filter media	Borosilicate glass micro fiber	
Core	Polypropylene	
Cage	Polypropylene	
End caps	Polypropylene + reinforcement	
Seal	Silicone, Viton, EPDM	

Maximum operating temperature

80°C (cartridges)

Maximum differential pressure forward (cartridges) 4,0 bar @ 20°C, 2,0 bar @70°C

Maximum differential pressure reverse (cartridges) 3,5 bar @ 20°C, 0,5 bar @80°C

Sterilization SIP (cartridges) 40 cycles for 15 mins @121°C, 0,5 bar dP

**Sterilization Autoclave** 40 cycles for 15 mins @121°C

# 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.

# **Regulatory compliance**

### TOC/Conductivity @25°C

Autoclaved filter effluent meets USP<643> for Total Organic Carbon and USP<645> for Water Conductivity per WFI requirements after UPW flush of specified volume.

### Non-fiber releasing

Non-fiber releasing component materials meet the criteria for a "non-fiber releasing filter" as per 21 CFR 210,3(b)(6).

### **Bacterial endotoxin**

Aqueous extraction of autoclaved filter contains <0,25 EU/ml as determined by Limulus Amebocyte Lysate (LAL), USP <85>.

### Biosafety

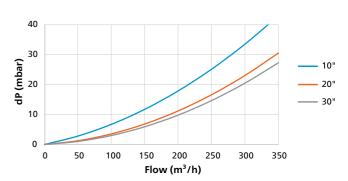
Meets criteria of USP <88> Biological Reactivity Test for class VI-121°C plastics.

### 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 test data, biological safety information and product approvals against the specific batch number and part number for the filter. The filter cartridges are manufactured in a controlled clean room environment that generally meets the requirements for ISO 14644-1 Class 8 Cleanrooms.



## Flow rate

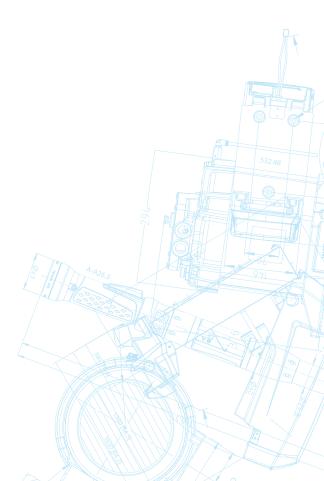
Note: 10" cartridge tested with air @ 20°C/7 barg (typical flow rate)

# **Product configuration**

# Cartridges

Series	Rating (µm)	Length	End cap	Seal
PFG-G	0,3	5"	C2 (2x226 O-ring + 2 tabs/flat)	S (Silicone)
	0,8	10″	C3 (2x222 O-ring/flat)	E (EPDM)
		20″	C7 (2x226 O-ring + 2 tabs/fin)	V (Viton)
		30″	C8 (2x222 O-ring/fin)	
		40″	C28 (2x222 O-ring + 3 tabs/fin)	
			DOE (flat + gasket/flat + gasket)	

Example: PFG-G 0,45µm 10" C7 S





Atlas Copco Process Filtration atlascopco.com