GASSHIELD® POINT-OF-USE BULK FILTERS 1.5 nm FILTRATION



BGF-12P23 - FIBER FILTER MEDIA

DESCRIPTION

Mott High Purity Fiber Bulk Filters provide filtration of particles down to $0.0015~\mu m$ resulting in particle-free gas. In addition, the flow versus differential pressure performance of these filters is equal or superior to the performance of competitive polymer products (refer to flow rate data on the following pages). Metal filter media is typically used downstream of purification systems, cryogenic systems and air separation plants to ensure gas quality and provide protection against catastrophic particle disturbances.

APPLICATIONS

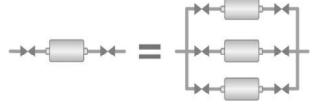
Mott provides the high-strength, all-metal solution to filtration requirements for gas flow streams at the gas pad. Mott bulk filters are ideally suited to the higher temperatures that can be encountered downstream of a purifier or during heated dry down operations.

OPERATING CONDITIONS

- » Maximum Operating Pressure: 200 psig (13.8 barg)
- » Maximum Operating Temperature for Inert Gas: 380°C
- » Maximum Differential Pressure: 175 psid (12.1 barg)

Mott's Fiber Metal Bulk Filter

Standard Porous Metal Filter Systems



Mott's Fiber Metal Bulk Filter replace multiple filters in parallel with a single unit Standard Porous Metal Bulk Filter
Systems require multiple filter units in
parallel to meet high flows

MATERIALS

» Hardware: 316L SS

» Filter Medium: 316L SS Fiber

SPECIFICATIONS

| Particle Removal Size: | ≥ 0.0015 μm |
|------------------------|---|
| Filtration Efficiency: | \geq 9 LRV (99.9999999% reduction in particles) at 0.0015 μm |
| Helium Leak Rating: | 1 x 10 ⁻⁹ atm cc/sec |
| Moisture Contribution: | <10 ppb after 1 hour at low-flow ambient purge per SEMI |
| | F27 test method |
| Total Hydrocarbons: | Below detectable limits per ASTM F1398 test method |
| Particle Shedding: | Zero particle contribution above background |
| | (<1 particle/ft³) per SEMI F43-0308 test method |

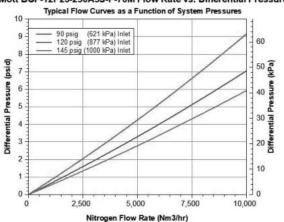
Ask us about our entire line of point-of-use gas filters, diffusers and flow restrictors. We can retrofit your current plant and can offer bundle packages for multi-filter purchases.

*N*arranty

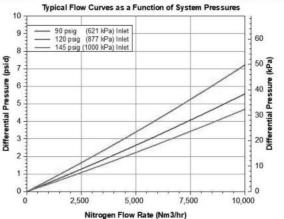
Mott Corporation ("Mott") warrants its GasShield filter will meet the specified retention and media integrity standards for a period of five years from the date of purchase, providing the filter is properly installed and used in accordance with the specified flow, pressure, temperature, and chemical compatibility as published by Mott. Mott will replace or grant a purchase price refund for any GasShield filter which proves defective under the terms of this limited warranty. No other remedies apply. Mott disclaims all other warranties, either expressed or implied, including any warranty of merchantability or fitness for a particular purpose. Mott shall have no liability for consequential incidental, special or punitive damages, lost profits or savings, or damages from lost production or damage to other materials.

FLOW DATA

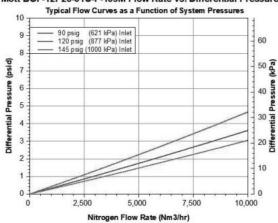
Mott BGF-12P23-250A5S-F-70M Flow Rate vs. Differential Pressure

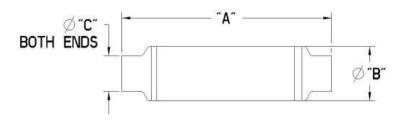






Mott BGF-12P23-6TS-F-135M Flow Rate vs. Differential Pressure





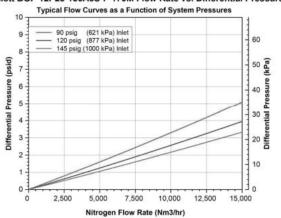
ORDERING INFORMATION

| Part Description | Part Number | Fitting Type | A Inches/mm | B Inches/mm | C Inches/mm |
|------------------------|-------------|--------------|----------------|---------------|---------------|
| BGF-12P23-250A5S-F-70M | 6825183 | JIS250A5S | 39.40 / 1000.6 | 12.75 / 323.9 | 10.53 / 267.5 |
| BGF-12P23-100A5S-F-90M | 6825185 | JIS100A5S | 39.40 / 1000.6 | 12.75 / 323.9 | 4.50 / 114.3 |
| BGF-12P23-6TS-F-135M | 6825328 | 6" Tube Stub | 39.40 / 1000.6 | 12.75 / 323.9 | 6.00 / 152.4 |

^{*}Other fitting types and sizes available upon request. Contact Mott Corporation for more information.

FLOW DATA

Mott BGF-12P23-150A5S-F-170M Flow Rate vs. Differential Pressure

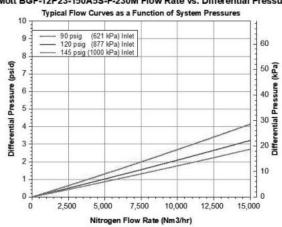


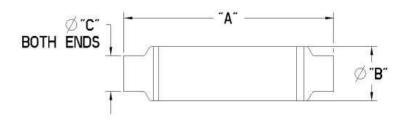
Mott BGF-12P23-6TS-F-200M Flow Rate vs. Differential Pressure Typical Flow Curves as a Function of System Pressures 90 psig (621 kPa) Inlet 120 psig (877 kPa) Inlet 9 60 145 psig (1000 kPa) Inlet 8 Differential Pressure (psid) 30 Differential Pressure 6 5

2 10 0 -0 2,500 12,500 15,000 Nitrogen Flow Rate (Nm3/hr)

Mott BGF-12P23-150A5S-F-230M Flow Rate vs. Differential Pressure

4





ORDERING INFORMATION

| Part Description | Part Number | Fitting Type | A Inches/mm | B Inches/mm | C Inches/mm |
|-------------------------|-------------|--------------|----------------|---------------|--------------|
| BGF-12P23-150A5S-F-170M | 6825182 | JIS150A5S | 39.40 / 1000.6 | 12.75 / 323.9 | 6.50 / 165.2 |
| BGF-12P23-6TS-F-200M | 6825329 | 6" Tube Stub | 39.40 / 1000.6 | 12.75 / 323.9 | 6.00 / 152.4 |
| BGF-12P23-150A5S-F-230M | 6825320 | JIS150A5S | 39.40 / 1000.6 | 12.75 / 323.9 | 6.50 / 165.2 |

^{*}Other fitting types and sizes available upon request. Contact Mott Corporation for more information.