

# Mott High Purity Bulk Gas Filters

## GasShield® Point-of-Use Series

### BGF 6X10

### Penta® Nickel Media



#### Description

Mott High Purity Bulk Filters provide 9-log filtration of particles down to 0.003 µm resulting in particle-free gas. In addition, the flow versus differential pressure performance of the filter is equal or superior to the performance of competitive polymer products on the market today. Flow rates up to 1,200 Nm<sup>3</sup>/hr and line sizes up to 6 inches are available.

#### 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 during heated dry down operations.

**Warranty:**  
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

#### Materials of Construction

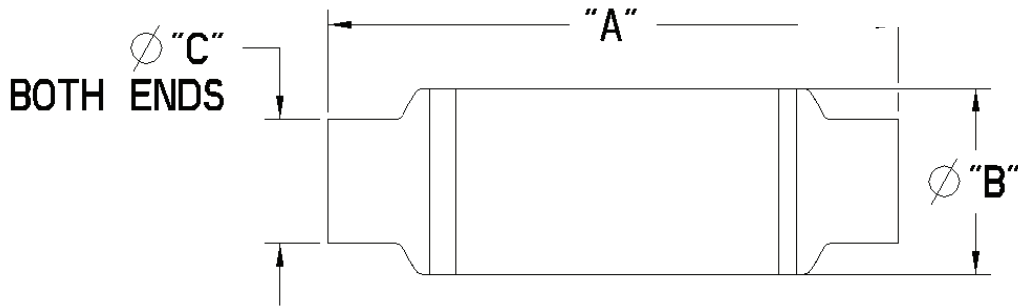
Hardware:	316L SS
Filter Medium:	Penta® Nickel
Wetted Hardware Surface Finish:	10 Ra, Electro-polished

#### Performance Specifications

Flow Rate:	19,000 slpm
Particle Removal Size:	0.003 µm
Filter Efficiency (Log Reduction Value):	9 LRV (99.999999% reduction in particles). Confirmed at the most penetrating particle size of 0.08 µm per SEMI F38-0699 test method
Helium Leak Rating:	1 x 10 <sup>-9</sup> 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 SEMASPEC 90120396B test method
Particle Shedding:	Zero particle contribution above background (<1 particle/ft <sup>3</sup> ) per SEMI F43-0308 test method

#### Operating Conditions

Maximum Operating Pressure:	400 psig (27.5 barg)
Maximum Operating Temperature for Inert Gas:	450°C
Maximum Differential Pressure:	250 psid (17.2 bar)



Ordering Information:

Part Description	Part Number	Fitting Type	A Inches/ mm	B Inches/ mm	C Inches/ mm
BGF-610-4TS-N-19M	6825312	4" Tube Stub	18.40/467.4	6.00/152.4	4.00/101.6
BGF-610-2TS-N-19M	6825311	2" Tube Stub	24.86/631.4	6.00/152.4	2.00/50.8
BGF-610-1.5TS-N-19M	6825314	1.5" Tube Stub	24.86/631.4	6.00/152.4	1.50/38.1
BGF-610-1TS-N-19M	6825313	1" Tube Stub	24.86/631.4	6.00/152.4	1.00/25.4

**Mott BGF-610 Flow Rate vs. Differential Pressure**  
Typical Flow Curves as a Function of System Pressures

