GASSHIELD® BGF 615HF HIGH FLOW BULK FILTER PENTA® NICKEL MEDIA



The BGF 615HF is the HIGHEST FLOW BULK GAS FILTER in a COMPACT DESIGN for MEGA-WAFER FABS

DESCRIPTION

Mott High Purity Bulk Filters provide 9-log filtration of particles down to 0.0025 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. Refer to flow rate data.



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.

OPERATING CONDITIONS

- » Maximum Operating Pressure: 400 psig (27.6 barg)
- » Maximum Operating Temperature for Inert Gas: 840°F (450°C) » Filter Medium: Penta® Nickel
- » Maximum Differential Pressure: 125 psid (8.6 bar)

MATERIALS

- » Hardware: 316L SS
- » Wetted Hardware Surface Finish: 10 Ra, Electro-polished

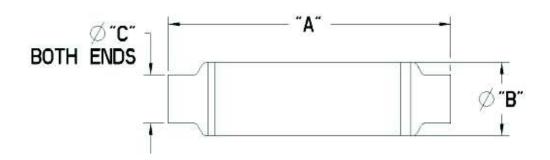
SPECIFICATIONS

Particle Removal Size:	≥ 0.0025 µm			
Filter Efficiency	9 LRV (99.999999% reduction in particles).			
(Log Reduction Value):	Confirmed at the most penetrating particle size of 0.08 µm per SEMI			
	F38-0699 test method			
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 SEMASPEC 90120396B test method			
Particle Shedding:	Zero particle contribution above background (<1 particle/ft³) per SEMIF43-0308 test method			

FLOW DATA

Mott BGF-615HF Flow Rate vs. Differential Pressure

Typical Flow Curves as a Function of System Pressures 11 30 psig (207 kPa) Inlet 70 10 60 psig (414 kPa) Inlet 90 psig (621 kPa) Inlet 9 120 psig (827 kPa) Inlet 60 8 Differential Pressure (psid) Differential Pressure (kPa) 50 7 6 40 5 30 4 3 20 2 10



30,000

Nitrogen Flow Rate (slpm)

40,000

50,000

60,000

ORDERING INFORMATION

1

0

10,000

20,000

Part Description	Part Number	Fitting Type	A Inches/mm	B Inches/mm	C Inches/mm
BGF-615HF-6TS-N-60M	6825149	6"Tube Stub	28.81/731.8	6.00/152.4	6.00/152.4
BGF-615HF-4TS-N-60M	6825150	4"Tube Stub	23.41/594.6	6.00/152.4	4.00/101.6
BGF-615HF-2TS-N-60M	6825151	2″Tube Stub	29.89/759.2	6.00/152.4	2.00/50.8

^{*}Custom designs and fittings available. Contact a Mott representative for more information.