# GASSHIELD® POINT-OF-USE FIBER FILTERS 1.5 nm FILTRATION



# POU-05-FSV1 - STAINLESS STEEL FIBER MEDIA

# **DESCRIPTION**

Mott High Purity Gas Filters provide 9-log filtration of particles down to  $0.0015~\mu m$  resulting in particle-free gas. For maximum gas filtration efficiency, strength and reliability, GasShield® POU all-metal gas filters are ideal for Ultra High Purity (UHP) gas delivery applications. They are compatible with most high purity electronics grade process gases. For more point-of-use filter offerings, check out the Mott line of Penta® nickel media or Defender fiber metal filters.



## **APPLICATIONS**

UHP gas sticks for semiconductor tool hook-up. UHP process gas filtration in valve manifold boxes, gas cabinets, tool isolation gas boxes, OEM gas boxes, and any UHP particle removal application.

#### **OPERATING CONDITIONS**

- » Maximum Operating Pressure: 3000 psig (206.8 barg)
- » Maximum Operating Temperature for Inert Gas: 460°C
- » Maximum Differential Pressure: 1000 psid (68.9 bar)

#### **MATERIALS**

- » Hardware: 316L SS VAR
- » Filter Medium: 316L SS Fiber
- » Wetted Hardware Surface Finish: 5 Ra

# **SPECIFICATIONS**

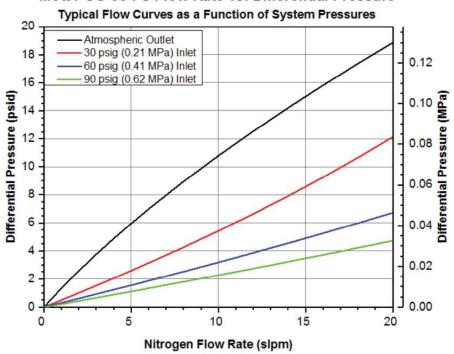
Particle Removal Size:	≥ 0.0015 μm			
Filter Efficiency	$\geq$ 9 LRV (99.9999999% reduction in particles).			
(Log Reduction Value):	Confirmed at the most penetrating particle size of 0.08			
	µm per SEMI F38-0699 test method			
Helium Leak Rating:	1 x 10 <sup>-9</sup> atm cc/sec			
Moisture Contribution:	<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/ft³) per SEMI F43-0308 test method			

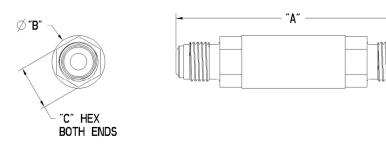
#### Warranty

Mott Corporation ("Mott") warrants its GasShield filters will meet the specified retention and media integrity standards for a period of five (5) 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 POU-05-FS Flow Rate vs. Differential Pressure





# **ORDERING INFORMATION**

Part Description	Part Number	Fitting Type	A Inches/mm	B Inches/mm	C Inches/mm
POU-05-FSV1	6700015	1/4 inch Male/Male Face Seal	3.31/84.0	0.75/19.0	0.625/15.9

<sup>\*</sup>Custom designs and fittings available. Contact a Mott representative for more information.