

# GASSHIELD® POINT-OF-USE GAS FILTERS

## 1.5 nm FILTRATION

**mott**  
MISSION CRITICAL PRECISION

### POU-10-HS - HASTELLOY® FILTER MEDIA & 316L SS HOUSING-

## DESCRIPTION

Mott High Purity Gas Filters provide 9-log filtration of particles down to 0.0015 µm 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 corrosive gas filtration for: gas sticks for equipment hookup, valve manifold boxes, gas cabinets, tool isolation gas boxes, on-board OEM tool gas boxes.

## OPERATING CONDITIONS

- » Maximum Operating Pressure: 2500 psig (172.5 barg)
- » Maximum Operating Temperature for Inert Gas: 450°C
- » Maximum Differential Pressure: 1000 psid (68.9 bar)

## MATERIALS

- » Hardware: 316L SS
- » Filter Medium: Hastelloy C-22
- » Wetted Hardware Surface Finish: 5 Ra, Electro-polished

## SPECIFICATIONS

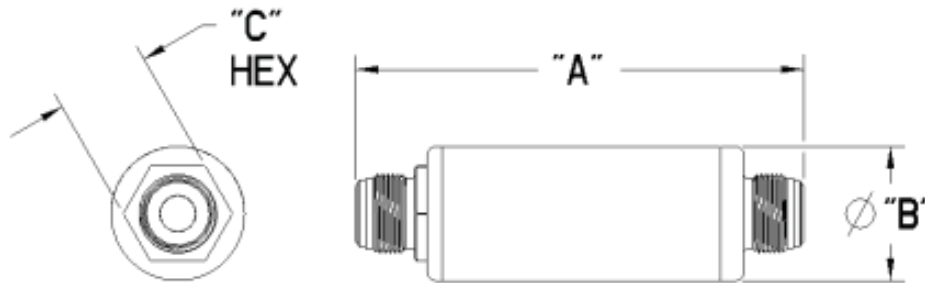
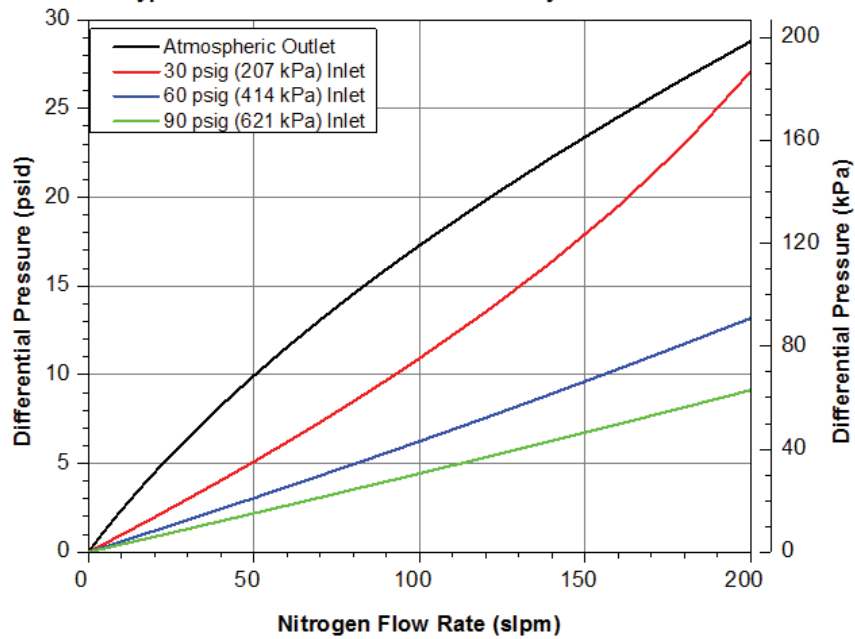
Particle Removal Size:	≥ 0.0015 µm
Filter Efficiency (Log Reduction Value):	≥ 9 LRV (99.9999999% reduction in particles). Confirmed at the most penetrating particle size of 0.08 µm per SEMI F38-0699 test method
Helium Leak Rating:	1 x 10 <sup>-9</sup> atm cc/sec
Moisture Contribution:	<10 ppb after 1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

**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.

# FLOW DATA

## Mott POU-10-H Flow Rate vs. Differential Pressure

Typical Flow Curves as a Function of System Pressures



## ORDERING INFORMATION

Part Description	Part Number	Fitting Type	A Inches/mm	B Inches/mm	C Inches/mm
POU-10-HSV1	6800046	1/4 inch Male/Male Face Seal	5.00/127.0	1.50/38.1	1.062/26.9
POU-10-HSV3	6800181	1/2 inch Male/Male Face Seal	5.00/127.0	1.50/38.1	1.062/26.9

\*Custom designs and fittings available. Contact a Mott representative for more information.

**Mykron**

Mykron Microelectronics Co., Ltd. 上海资方微电子有限公司

No.12 Yi, Chao Yang Men Street (North), Beijing, 100020, China

Beijing: Tel. (86)10-6551 0500 Fax (86)10-6551 0501

<http://www.mykrns.com>