

GASSHIELD® POINT-OF-USE SERIES

POU-3-NS

NICKEL 200 FILTER MEDIA



DESCRIPTION

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, LED, Photovoltaic and MEMS Equipment Hookup. UHP filtration in valve manifold boxes, gas cabinets, tool isolation gas boxes, on-board gas delivery boxes or any process requiring ultra high purity particle removal.



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: Nickel 200
- » Wetted Hardware Surface Finish: 5 Ra, Electro-polished

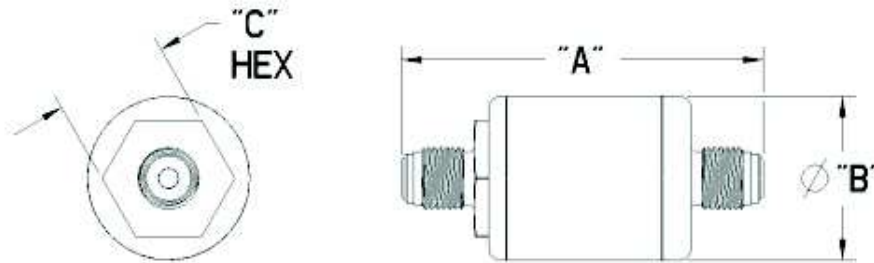
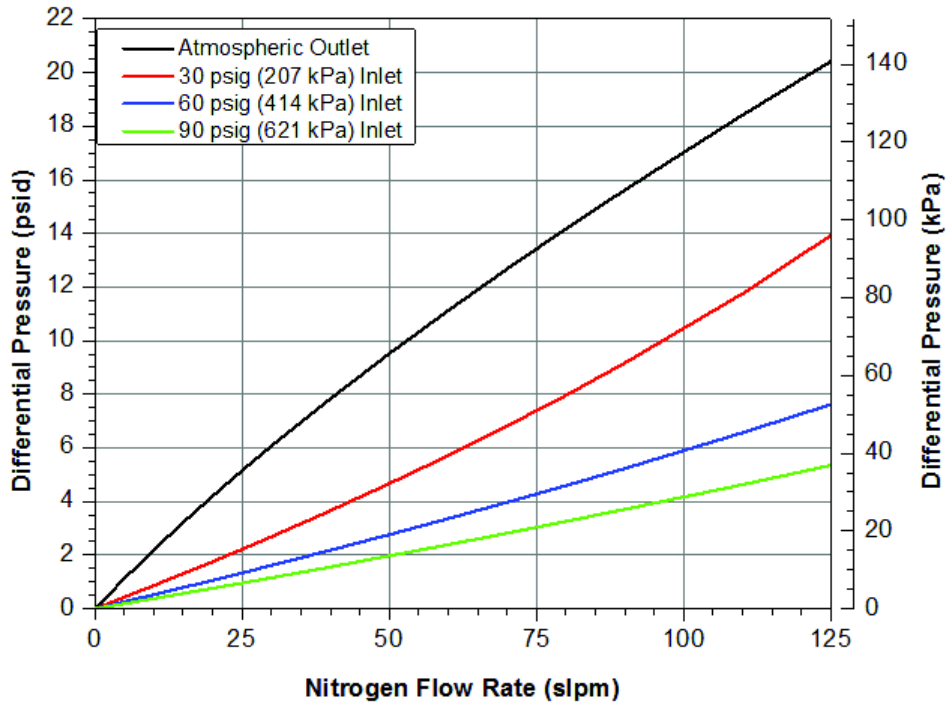
SPECIFICATIONS

Particle Removal Size:	≥ 0.0025 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 ⁻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/ft ³) per SEMIF43-0308 test method



FLOW DATA

Mott POU-3-N 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-3-NSV1	6800001	1/4 inch Male/Male Face Seal	3.31/84.0	1.50/38.1	1.062/26.9

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