

GASSHIELD® POINT-OF-USE SERIES

POU-05-S

STAINLESS STEEL FILTER MEDIA



DESCRIPTION

For maximum gas filtration efficiency, strength and reliability, Mott GasShield POU all-metal gas filters are ideal for Ultra High Purity (UHP) gas delivery applications. They are compatible with most high purity semiconductor 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, and OEM gas boxes. Any process requiring ultra high purity particle removal.



OPERATING CONDITIONS

- » Maximum Operating Pressure: 3750 psig (258.5 barg)
- » Maximum Operating Temperature for Inert Gas: 450°C
- » Maximum Differential Pressure: 1000 psid (68.9 bar)

MATERIALS

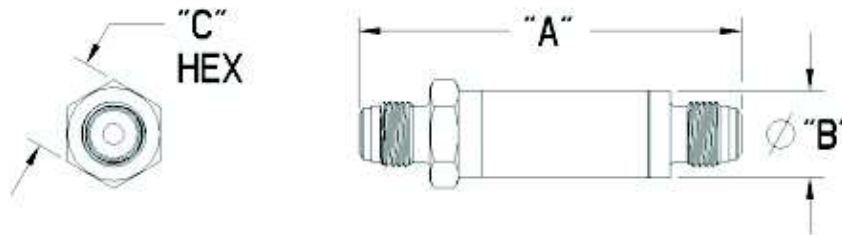
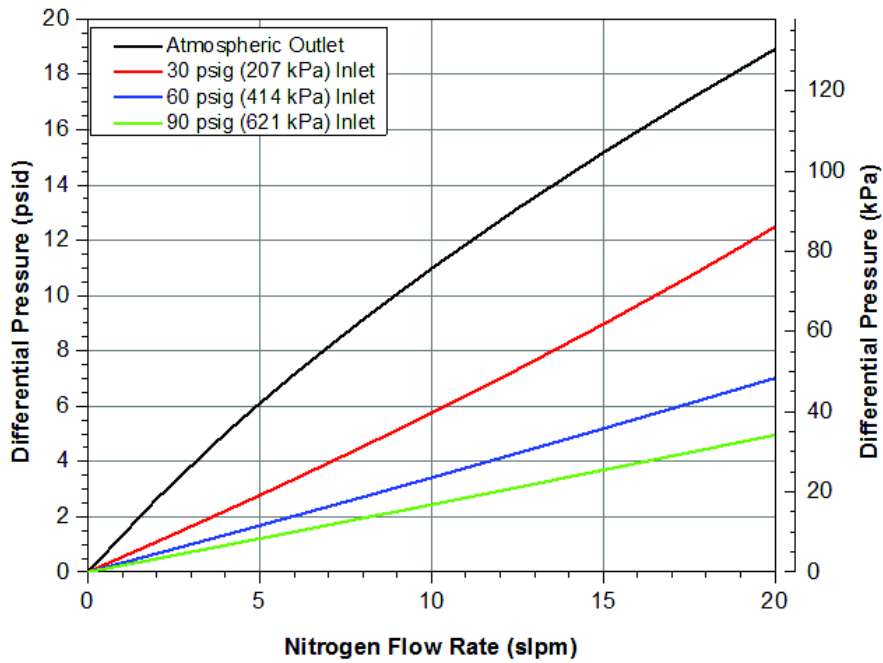
- » Hardware: 316L SS
- » Filter Medium: 316L SS
- » Wetted Hardware Surface Finish: 5 Ra, Electro-polished

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-05-S 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-05-SV1	6800017	1/4 inch Male/Male Face Seal	3.31/84.0	0.75/19.0	0.812/20.6
POU-05-ST1	6800059	1/4 inch Butt Weld Tube Stubs	3.31/84.0	0.75/19.0	N/A

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