

# GASSHIELD® POINT-OF-USE SERIES

## POU-05-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 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

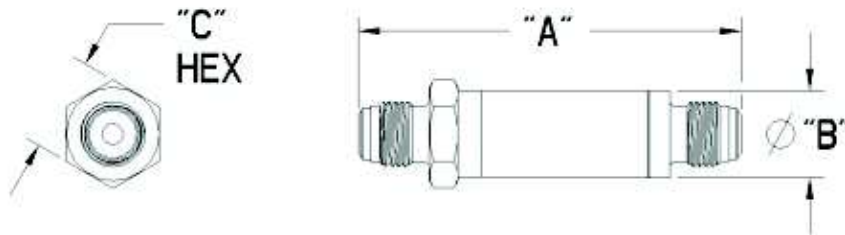
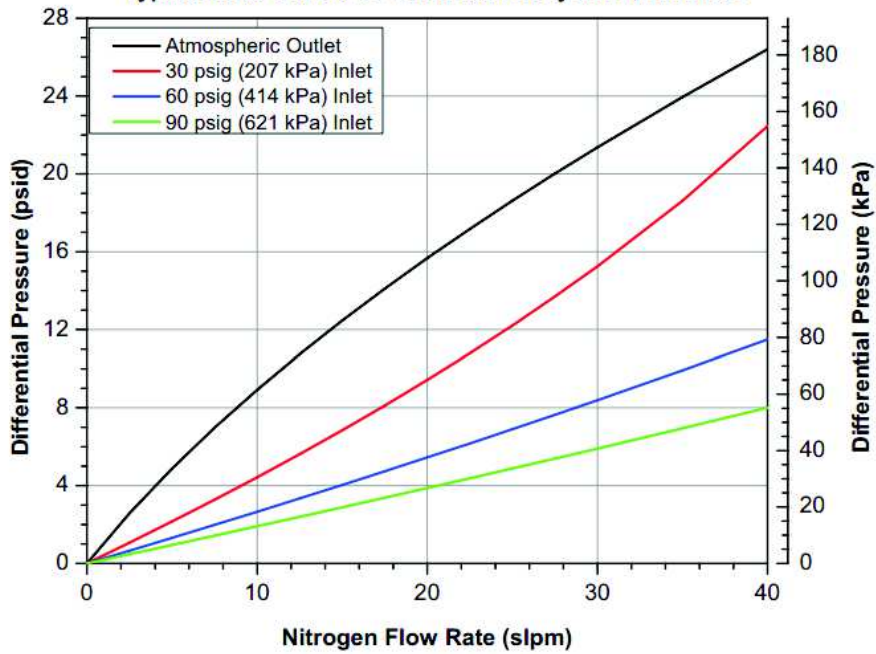
- » Hardware: 316L SS
- » Filter Medium: Nickel 200
- » Wetted Hardware Surface Finish: 5 Ra, Electro-polished

## 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 <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 SEMIF43-0308 test method

# FLOW DATA

**Mott POU-05-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-05-NSV1	6800052	1/4 inch Male/Male Face Seal	3.31/84.0	0.75/19.0	0.812/20.6
POU-05-NST1	6800070	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.