

GASSHIELD® POINT-OF-USE SERIES POU-10-S STAINLESS STEEL 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 filters, check out the Mott line of Penta® nickel media or Defender fiber metal filters.

APPLICATIONS

High Flow 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: 316L SS
- » Wetted Hardware Surface Finish: 5 Ra, Electro-polished

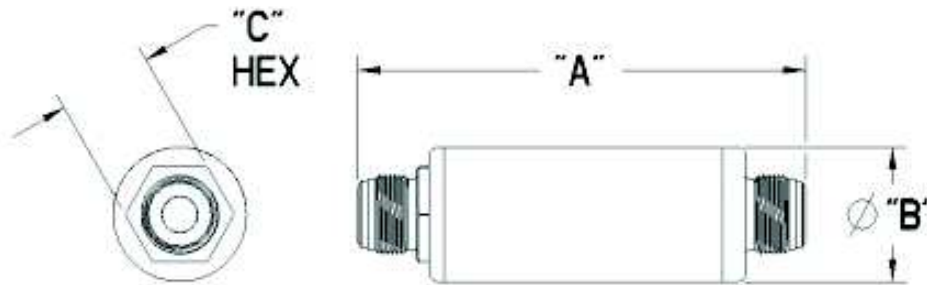
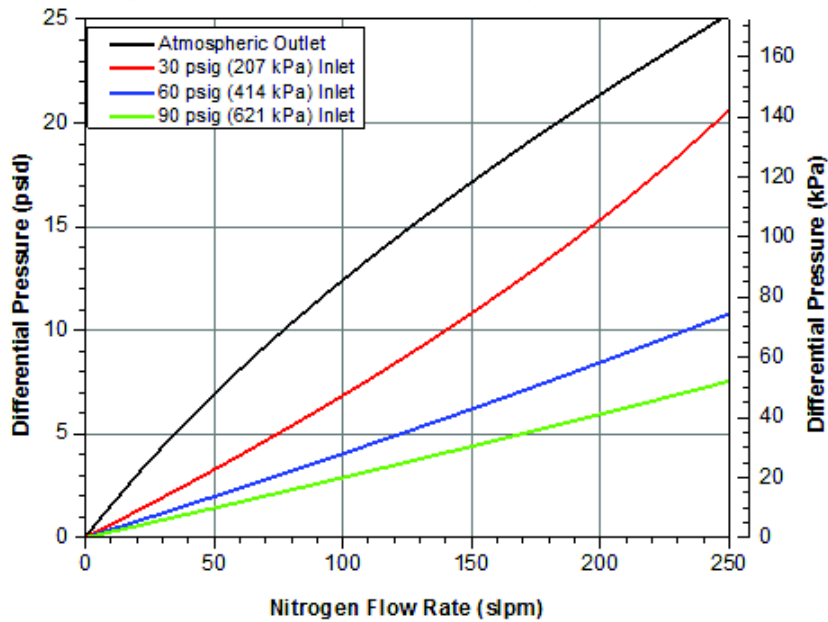
SPECIFICATIONS

| | |
|--|---|
| 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-10-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-10-SV1 | 6800003 | 1/4 inch Male/Male Face Seal | 5.00/127.0 | 1.50/38.1 | 1.062/26.9 |
| POU-10-SV3 | 6800007 | 1/2 inch Male/Male Face Seal | 5.00/127.0 | 1.50/38.1 | 1.062/26.9 |
| POU-10-ST1 | 6800011 | 1/4 inch Butt Weld Tube Stubs | 5.00/127.0 | 1.50/38.1 | N/A |
| POU-10-ST3 | 6800073 | 1/2 inch Butt Weld Tube Stubs | 5.00/127.0 | 1.50/38.1 | N/A |

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