

Mott High Purity Gas Filter

Sentry Series

Penta[®] Nickel Filter Media



Description

The Sentry is a line of cost effective all-metal Ultra High Purity (UHP) gas filters that utilizes the Mott Patented Penta nickel media. The Sentry filter provides 9 LRV filtration down to 0.003 μm .

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.

Materials of Construction

Hardware:	316L SS
Filter Medium:	Penta Nickel
Wetted Hardware Surface Finish:	10 Ra, Electro-polished

Performance Specifications

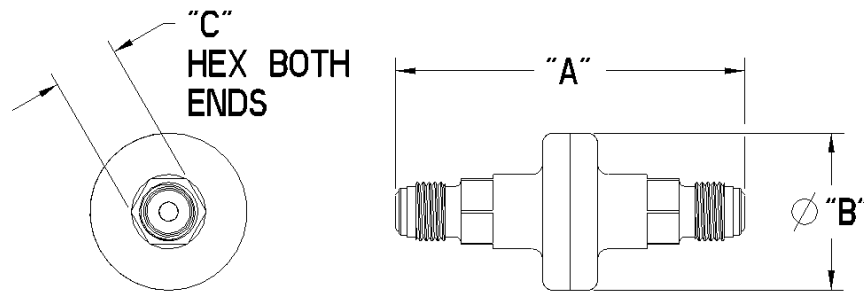
Rated Flow:	30 slpm
Particle Removal Size:	0.003 μm
Filter Efficiency (Log Reduction Value):	9 LRV (99.9999999% reduction in particles). Confirmed at the most penetrating particle size of 0.08 μm per SEMI F38-0699 test method
Helium Leak Rating:	1 x 10 ⁻⁹ atm cc/sec
Moisture Contribution:	<10 ppb after 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 SEMI F43-0308 test method

Operating Conditions

Maximum Operating Pressure:	3000 psig (207 barg)
Maximum Operating Temperature for Inert Gas:	450°C
Maximum Differential Pressure:	500 psid (34.5 bar)

mott corporation

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Ordering Information:

Part Description	Part Number	Fitting Type	A Inches/mm	B Inches/mm	C Inches/mm
SEN331NFF11	6815001	1/4 inch Male/Male Face Seal	3.31/84.0	1.50/38.1	0.625/15.9
SEN280NFP11	6815005	1/4 inch Male/Female Face Seal	2.81/71.3	1.50/38.1	0.625/15.9
SEN112NTT11	6815004	1/4 inch Butt Weld Tube Stubs	1.12/28.4	1.50/38.1	N/A

Mott SEN331N Flow Rate vs. Differential Pressure
 Typical Flow Curves as a Function of System Pressures

