

GASSHIELD® DIFFUSER SERIES

C-22 DIFFUSER - HASTELLOY® FILTER MEDIA

mott
MISSION CRITICAL PRECISION

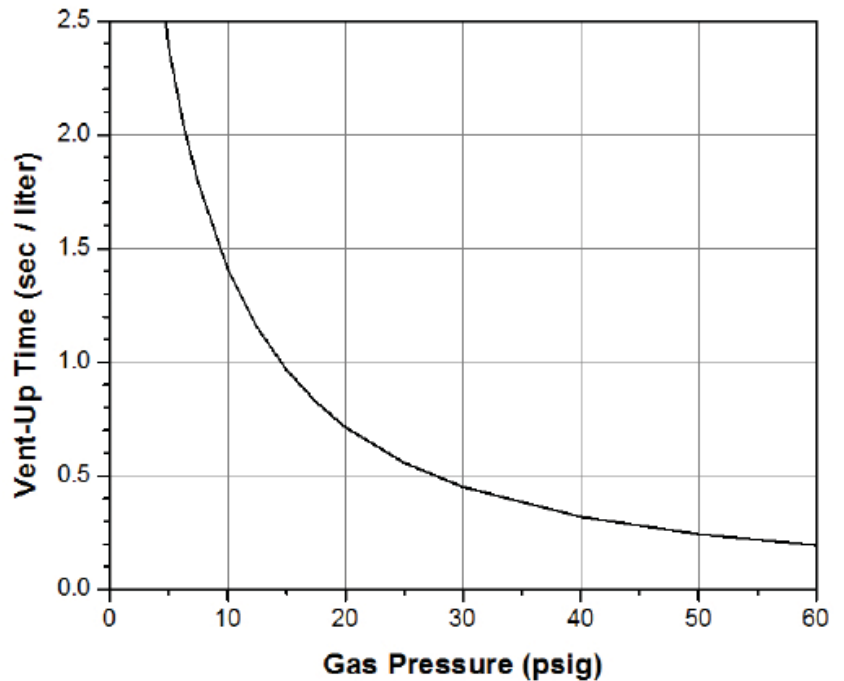
1.5 nm PARTICLE CAPTURE 3,000,000 CYCLES

Superior corrosion resistance over stainless steel and nickel, and product integrity for over 3 million cycles at high operating pressures are now available with Mott GasShield® Hastelloy® C-22 diffusers.

GasShield® Diffusers quickly vent vacuum chambers to atmosphere, decreasing cycle time and increasing throughput while providing uniform and laminar gas flows without disturbing particles in the chamber. GasShield® Diffusers are proven to remove particles down to 0.0015 μm .



Performance Data for Mott GSE-FLG-2.0-F1-NW50-C22 Diffuser



APPLICATIONS

Use Mott diffusers with the most corrosive gases in vent applications on

- » load lock chambers
- » transfer chambers
- » cooling chambers, and
- » process chambers

of Semiconductor equipment interfaces (CVD, PVD, Etch, Epi) or other vacuum chambers.

Hastelloy is a registered trademark of Haynes International, Inc

SPECIFICATIONS

| | |
|------------------------|---|
| Particle Removal Size: | Confirmed down to 0.0015 μm |
| Particle Shedding: | Zero particle contribution above background (<1 particle/ft ³) per SEMIF43-0308 test method |

CONNECTIONS

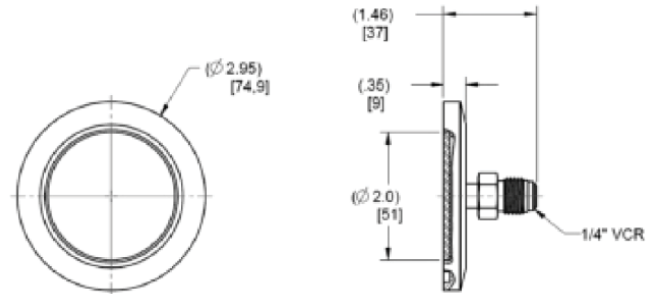
- » Inlet: 1/4" Male Swivel VCR
- » Outlet: ISO NW50 (Designed for bulkhead mount with standard ISO bulkhead clamps)
- » O-Ring Material: Viton
- » O-Ring Size: 2-229
- » O-Ring Groove ID: 2.36" (59.9 mm)
- » O-Ring Groove OD: 2.67" (67.9 mm)
- » O-Ring Groove Depth: 0.102" (2.6 mm)

MATERIALS

- » Hardware: 316L SS or Hastelloy® C-22
- » Filter Medium: Hastelloy C-22
- » Wetted Hardware Surface Finish: $\leq 10 \text{ Ra}$

OPERATING CONDITIONS

- » Max Operating Pressure: 60 psig (4.1 barg)
- » Max Operating Temperature for Inert Gas
860°F (460°C) without o-ring
212°F (100°C) with o-ring
- » Max Differential Pressure: 75 psid (5.2 bar)



ORDERING INFORMATION

| Part Description | Part Number | Fitting Type | Hardware | Outlet Connections |
|-------------------------|-------------|----------------------------|----------------|--|
| GSE-FLG-2.0-F1-NW50-C22 | 6894044 | 1/4" Male Swivel Face Seal | Hastelloy C-22 | ISO NW50 (Bulkhead mount with standard ISO bulkhead clamps) |

Other custom designs and fittings available. Contact a Mott representative for more information.

WARRANTY

Mott Corporation ("Mott") warrants its GasShield diffuser will meet the specified retention and media integrity standards for a period of five years or 3,000,000 cycles whichever comes first from the date of purchase, providing the diffuser is properly installed and used in accordance with the specified flow, pressure, temperature, and chemical compatibility as published by Mott. Mott will replace or grant a purchase price refund for any GasShield diffuser which proves defective under the terms of this limited warranty. No other remedies apply. Mott disclaims all other warranties, either expressed or implied, including any warranty of merchantability or fitness for a particular purpose. Mott shall have no liability for consequential, incidental, special or punitive damages, lost profits or savings, or damages from lost production or damage to other materials.