

# GASSHIELD® DIFFUSER SERIES

## 1.5 nm PARTICLE CAPTURE

**mott**  
MISSION CRITICAL PRECISION

### C-22 DIFFUSER - HASTELLOY® FILTER MEDIA

#### DESCRIPTION

Corrosion resistance superior to stainless steel and nickel is now available using Mott GasShield® Hastelloy® C-22 diffusers with product integrity for over 3 million cycles at high operating pressures. GasShield® Diffusers quickly vent vacuum chambers to atmosphere which decreases cycle time and increases throughput while providing uniform and laminar gas flows without disturbing particles in the chamber. These diffusers have also been confirmed to remove particles down to 0.0015 µm.

#### APPLICATIONS

Mott diffusers can now be used with the most corrosive gases yet 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.

#### CONNECTIONS

- » Inlet: ¼" 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: ≤ 10 Ra

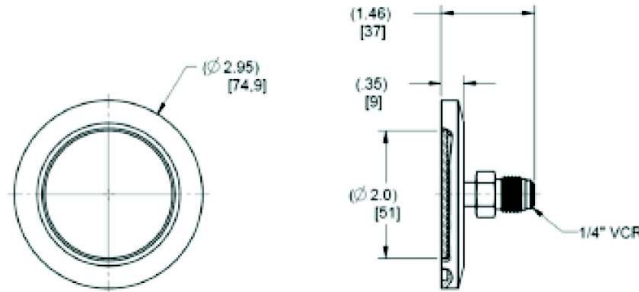
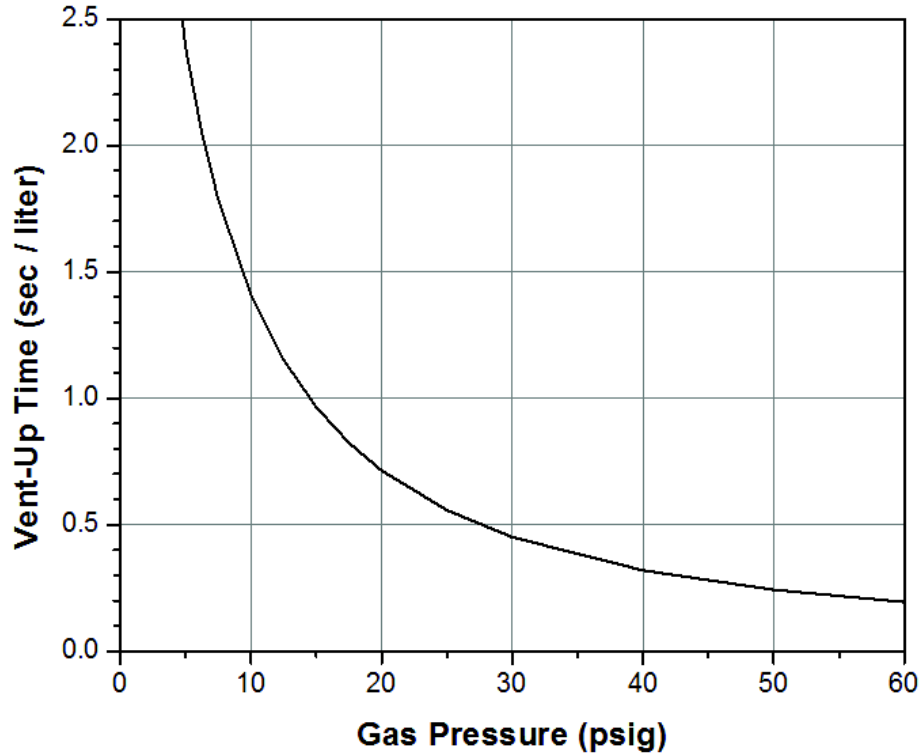
#### SPECIFICATIONS

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

Hastelloy is a registered trademark of Haynes International, Inc



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



## 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	316L SS	ISO NW50 (Bulkhead mount with standard ISO bulkhead clamps)

\*Hastelloy® C-22 hardware and 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.