

GASSHIELD® DIFFUSER SERIES CENTERING RING DIFFUSERS

mott
MISSION CRITICAL PRECISION

GasShield® Diffusers can provide durability up to **3 MILLION CYCLES**

DESCRIPTION

Mott centering ring diffusers are flexible and easily installed into vacuum systems. They are ideal for clean, fast, and turbulence-reduced backfills. The results are increased product yield and equipment throughput. They also maintain product integrity for up to 3,000,000 cycles when properly installed and used within specified operating conditions.

APPLICATIONS

Mott diffusers are used 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 where large volumes of gas flows are required in a short amount of time.

OPERATING CONDITIONS

- » Max Operating Pressure: 100 psig (6.89 barg)
- » Max Operating Temperature for Inert Gas
 - 840°F (450°C) without o-ring
 - 212°F (100°C) with o-ring
- » Max Differential Pressure: 44 psid (3 bar)

SPECIFICATIONS

Particle Shedding:	Zero particle contribution above background (<1 particle/ft ³) per SEMIF43-0308 test method
Lifetime:	Expected lifetime under normal operating conditions is 3,000,000 cycles (See warranty)



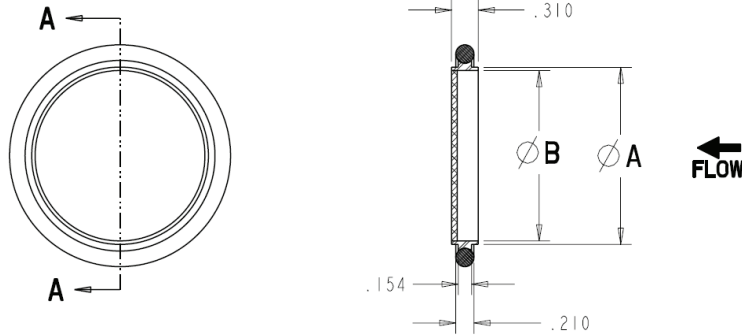
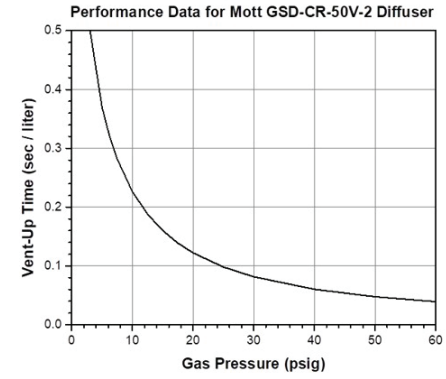
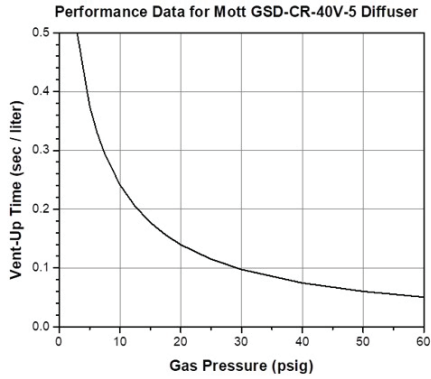
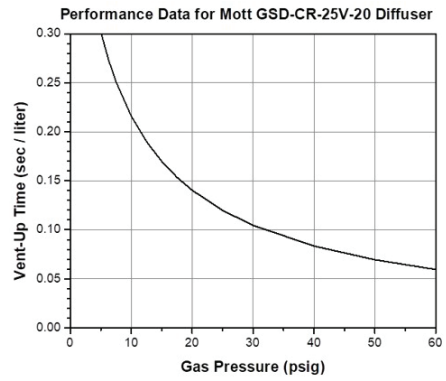
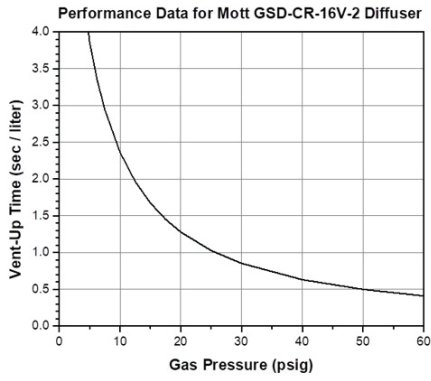
MATERIALS

- » Filter Medium: 316L SS or Alloy 22*
- » O-Ring Material: Viton

Warranty:

Mott Corporation ("Mott") warrants its GasShield® Diffuser products will meet the specified retention and media integrity standards for a period of one year 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 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.

FLOW DATA



ORDERING INFORMATION

Part Description	Fitting Type	A Inches/mm	B Inches/mm	Active Porous Area (In ²)
GSD-CR-16V-MG	NW16	0.67 / 17.0	0.63 / 16.0	0.31
GSD-CR-25V-MG	NW25	1.02 / 25.9	0.98 / 24.9	0.76
GSD-CR-40V-MG	NW40	1.61 / 40.9	1.57 / 39.9	1.93
GSD-CR-50V-MG	NW50	2.05 / 52.1	1.97 / 50.0	3.03
GSD-CR-100V-MG	NW100	4.00 / 101.6	3.89 / 98.8	11.51

NOTE: MG - Media Grade of Porous: 0.2, 0.5, 2, 5, 10, 20
 Custom designs and fittings available. Contact a Mott representative for more information.

*Alloy 22 or UNS N06022 is a nickel-chromium-molybdenum super-alloy commonly referred to as Hastelloy® C-22®.