

## > IGS Surface Mount Filters C-Seal Configuration



High-precision, high-flow, all-metal filtration engineered specifically for Integrated Gas System (IGS) assemblies

Mott High Purity – who for years has provided the highest quality porous metal filters and flow restrictors for semiconductor manufacturing – also offers these same products in IGS-compatible designs. So now you can combine the ease of installation, stick component accessibility, ease of maintenance, reduced assembly time and compatibility between components that are typical of IGS, with the selection and performance benefits offered exclusively by Mott.

Mott's mission is to provide customers with unique filtration and flow control solutions using materials specifically designed for demanding operating conditions, 9 LRV efficiency and exacting flow control. Our full line of IGS filters and flow restrictor products is designed for compatibility with the gas system interfaces currently being specified on process tools, gas cabinets, and valve manifold box installations. As the challenges of the 300mm conversion have emerged, our technology has provided the necessary solutions.

- **High flow rates** – Mott porous metal media has unique properties that allow for the production of a wider range of flow, material and configuration options than our competitors. This flexibility in geometry provides filters with flow ratings of up to 100 slpm while meeting the envelope requirements of the industry.
- **Wide choice of materials** – Mott IGS filters are constructed of 316L SS, Hastelloy® C-22 or PENTA® Nickel, the most comprehensive offering in the industry. This translates to chemical compatibility with virtually any gas used in semiconductor production today, without elastomers or other non-metallic materials which could flex or shed particles.
- **Complete range of product configurations** – Mott's standard IGS modular mount offerings include the 1.125" configuration with C-Seal or W-Seal. We have the design you need.

Features	Benefits
All-Metal Capabilities	Withstands high temperatures and pressures
All-Welded Construction	No mechanical seals
Standard Footprint	Easy retrofit
Mott Porous Media	Reliable 9 LRV filtration down to 0.003µm
Standard IGS Interface	Many configuration options
Compact IGS Design	Consumes less space than standard In-line designs
Design Flexibility	Wide range of materials, configurations and flow rates
Modular IGS Design	Ease of installation, reduced part variations and inventories

### 1.125" Filter Design

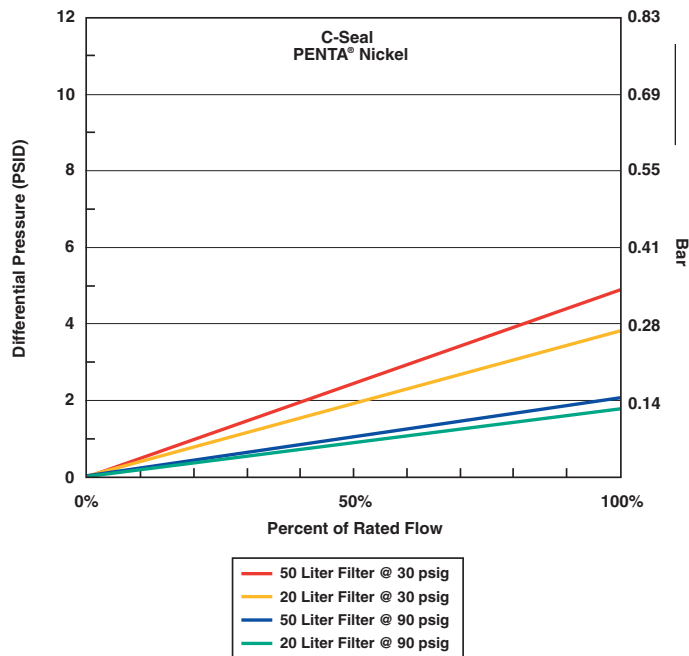
Flow passages equivalent to 1/4" tubing. Standard flow rates up to 50 slpm. Compatible with most popular compact modular substrate systems.

Hastelloy is a registered trademark of Haynes International, Inc.

# Typical Flow Curves for Mott 1.125".

## The distinct advantages of using Mott products

Typical Differential Pressure vs. Flow



Part Description for Standard Configurations	Computer Part Number (CPN*)	Maximum Rated Flow (slpm)	Overall Height (inches)	Filter Element Material	Housing Material	Seal Configuration
<b>1.125" Filters</b>						
GSMM-75-020-12	6813032	20	1.6	Nickel	316L SS	C-Seal
GSMM-75-030-12	6813042	30	2.4	Nickel	316L SS	C-Seal
GSMM-75-050-12	6813053	50	4.0	Nickel	316L SS	C-Seal
GSMM-75-010-11	6813054	10	2.4	316L SS	316L SS	C-Seal
GSMM-75-030-11	6813055	30	4.0	316L SS	316L SS	C-Seal
GSMM-75-010-33	6813056	10	2.4	Hastelloy C-22	Hastelloy C-22	C-Seal
GSMM-75-030-33	6813057	30	4.9	Hastelloy C-22	Hastelloy C-22	C-Seal

\* Order by CPN.

**mott corporation**



ISO 9001:2008 CERTIFIED  
HPIGSC 0111

84 Spring Lane, Farmington, CT 06032-3159 | 860-747-6333 Fax 860-747-6739  
www.mottcorp.com | email: quest@mottcorp.com