



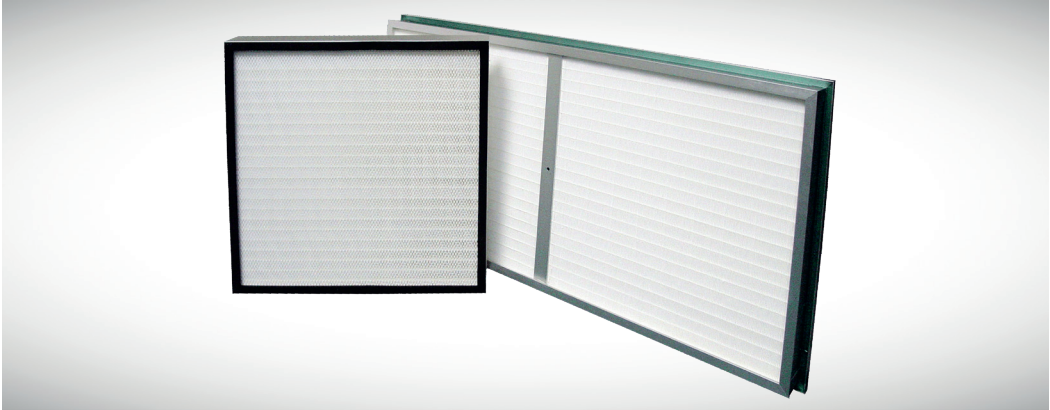
Microclass Panel
Filters
Low Profile HEPA
& ULPA Cleanroom
Filters

Microclass Panel Filters

Space-Saving, High Efficiency Filtration

FEATURES

- Low profile
- Available in gasket seal models with 2.75" (70 mm), 3" (76 mm), 3.5" (89 mm), 4.75" (120 mm) & 5.875" (149 mm) frames
- Available in gel seal with 3" (76 mm), 3.72" (95 mm) & 4.85" (123 mm) frames
- Metal faceguard
- 2" (53 mm) to 4" (100 mm) media pack
- Anodized, extruded aluminum frame
- Quality controlled manufacturing facility



LOW PROFILE HEPA/ULPA PANEL FILTERS FOR CLEANROOM APPLICATIONS

MANN+HUMMEL Air Filtration Americas Microclass HEPA/ULPA panel filters are designed for use in Cleanroom applications where a compact footprint and high efficiency filtration is needed. Applications include medical, pharmaceutical, microelectronics as well as other Cleanroom disciplines.

The Microclass HEPA/ULPA panel filter features include a low profile, from only 2.75" (70 mm) cell sides to allow for maximum space utilization in space sensitive applications.

All Microclass HEPA/ULPA panel filters are available in efficiencies from 99.99% @ 0.3 micron-sized particles to 99.9995% on 0.1 to 0.2 micron-sized particles, which is typically the MPPS (Most Penetrating Particle Size) for this filter in most applications.

Microclass HEPA/ULPA panel filters are available with either a gasket seal or gel seal as needed per application.

GASKET SEAL FILTERS

Frame & media pack combinations

FRAME	MEDIA PACK
3" (76 mm)	2" (53 mm)
3.5" (89 mm)	3" (70 mm)
4.75" (120 mm)	2" (53 mm), 3" (70 mm) or 4" (100 mm)
5.875" (149 mm)	2" (53 mm), 3" (70 mm) or 4" (100 mm)

GEL SEAL FILTERS

Frame & media pack combinations

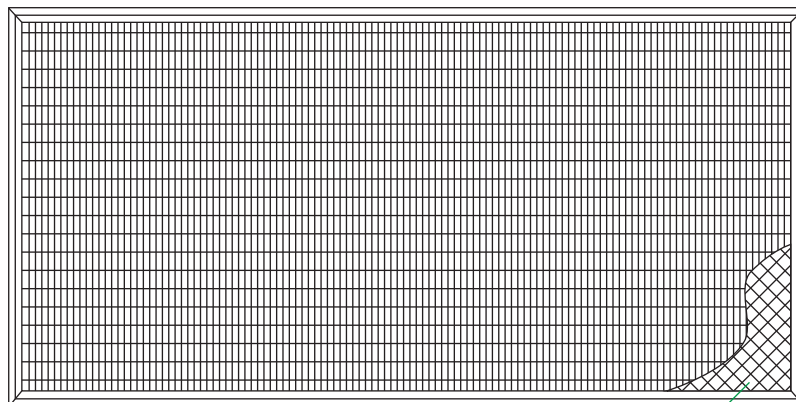
FRAME	MEDIA PACK
3" (76 mm)	2" (53 mm)
3.72" (94 mm)	3" (70 mm)
4.85" (123 mm)	3" (70 mm) or 4" (100 mm)

Rigid & Robust For Reliability You Can Count Upon

CONSTRUCTION

MANN+HUMMEL Air Filtration Americas designs and manufactures the Microclass HEPA/ULPA panel filters with anodized, extruded aluminum frames that are connected at the corners with the Microclass dual-corner fastener system that produces an airtight and rigid joint. The media pack is encapsulated into the frame on all four sides with a polyurethane sealant. Microclass panel filters are available with an optional painted, expanded metal grille on the downstream side of the media pack for protection. The media pack is constructed of glass microfiber that is mini-pleated into 2" (53 mm), 3" (76 mm) or 4" (100 mm) thick media packs. The pleats are separated and secured by an adhesive bead separator. The Microclass separator system is precisely applied to promote uniform air flow and to eliminate media-to-media contact and the fiber break-off related to different pleating methods. The Microclass media pack is manufactured on a computer controlled pleater for consistent and repeatable media packs.

MANN+HUMMEL Air Filtration Americas is proud of our quality controlled production facility that houses our state-of-the-art manufacturing equipment.

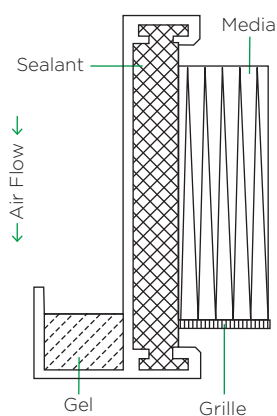


Optional Grille

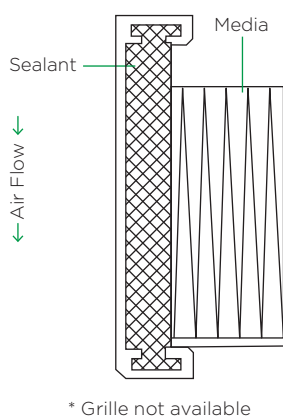
Microclass Panel Filters Technical Specifications

SEAL OPTIONS - CROSS SECTIONS

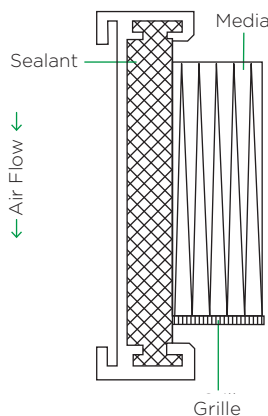
Gel Seal
3.0", 3.72" & 4.85" depth



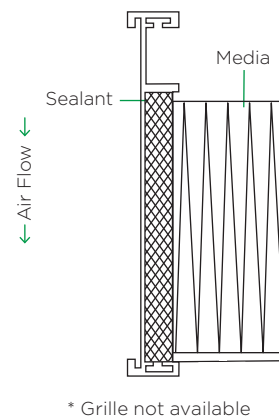
Gasket Seal
3.0", 3.5" & 4.75" depth*



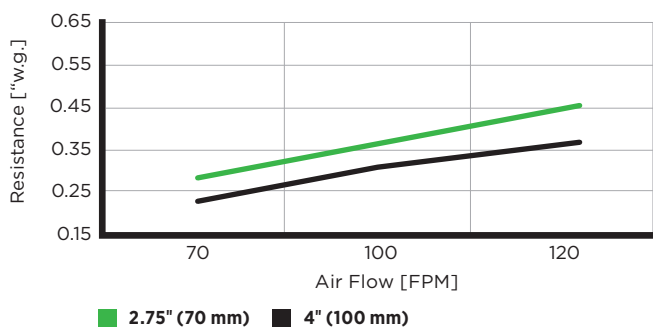
Gasket Seal
2.75" depth



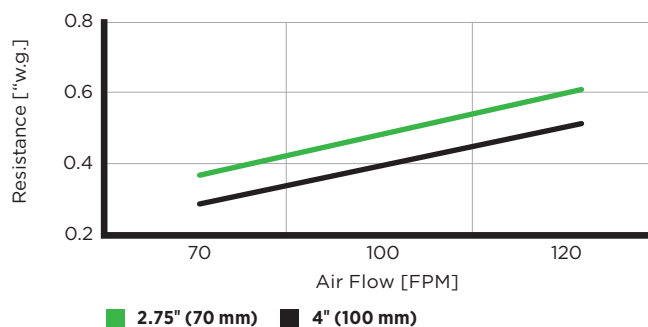
Gasket Seal
5.875" depth*



HEPA RESISTANCE VS. AIR FLOW



ULPA RESISTANCE VS. AIR FLOW



MANN+HUMMEL is committed to continual product development - all descriptions, specifications and performance data are subject to change without notice. MANN+HUMMEL products are manufactured to exacting criteria - there can be a $\pm 5\%$ variance in filter performance.

LOCAL REPRESENTATIVE