

# Pharmaslim Ducted Ceiling Module All-Welded Roomside Replaceable Ducted Ceiling Module



Maintain critical roomside clean space with a leak free welded terminal filter housing



The Camfil Pharmaslim ceiling module provides clean room level air filtration for pharmaceutical or biotechnology facilities as well as any other facility where clean space is a manufacturing or health-related requirement. Its unique roomside replaceable filter design minimizes downtime and ensures repeatable room air cleanliness following filter service. The Camfil Pharmaslim:

- Has a total hood height of only 9" (less heigth of connection collar) and is available in full and half size to accommodate 21-3/4" x 44" or 21-3/4" x 20" by 53mm deep HEPA filters.
- Is constructed of 0.063" aluminum with all-welded seams to eliminate leak paths and ensure structural rigidity.
- Has a universal body type for installation into a T-bar or plaster ceilings.
- Includes hanging tabs on each corner for suspended ceiling installations.
- Includes a centered top inlet 12" round raised-rib collar for secure connection to HVAC air supply.
- Includes a radial bow-tie damper with roomside hexagonal connection control to adjust for proper air volume to the conditioned space.
- Includes a flexible vinyl aerosol pipe and dispersion plate system for uniform challenge distribution across the entire face of the filter. The dispersion plate includes apertures to facilitate airflow uniformity throughout the module.
- Includes a roomside labeled static pressure port for evaluating filter pressure drop or sampling of the upstream aerosol concentration during filter scan testing. Ports and damper adjustment location allow easy filter change, airflow adjustment and filter scan testing from the roomside.
- Includes a roomside labeled aerosol injection connection to accomodate unit certification.
- Includes filter standoffs that also act as filter centering
- Accepts 53mm deep Camfil Megalam® gel seal filters.
- Includes a flush-mounted face grille with four acorn nuts for unit service. The grille is optimized to promote uniform airflow.
- Is available with optional 2" foil backed fiberglass insulation.

#### **Leak-Free Welded Construction**

All seams are welded to eliminate any contaminating leak paths. Each Pharmaslim is leak tested to 3.0" w.g. to ensure leak free performance.



#### **Additional Welded Points**

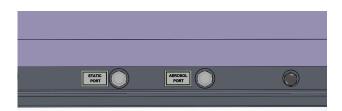
Corner joint of knife-edge junctures are continuously welded to eliminate leak paths. Knife-edge design ensures that filter will not bottom out in the track eliminating metal to metal contact and potential bypass.

#### **Gel-Penetrating Knife-Edge**

The Camfil Pharmaslim includes a gel-penetrating knifeedge that affects a positive seal.

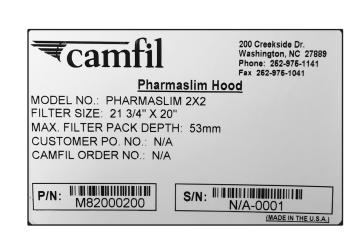
#### **Permanent Trim**

Universal body design allows installation into T-bar or plaster ceilings.



#### **Static Pressure Port & Aerosol Injection Port**

A static pressure port for measuring the pressure drop across the installed filter and an aerosol injection port for roomside testing convenience. There is also an external damper adjustment for regulating airflow. All are conveniently located in the same proximity.



#### **Hanging Support Tabs**

The Pharmaslim includes hanging tabs on each corner for attachment to an external support system.



#### **Radial Bow tie Damper**

Accurate airflow modulation and control from the roomside. The radial bow tie damper is riveted to the Pharmaslim housing.



#### **Ribbed Duct Connection Collar** 12" inlet is ribbed to ensure secure duct

connection.



#### Removable Grille

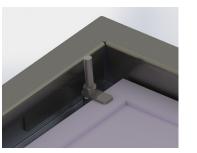
The Pharmaslim comes with a removable grille constructed of stainless steel, the grille ensures protection of the filter and internal housing components and has a 40% open area.

#### Air/Aerosol Diffuser Plate & Injection Ring

The air/aerosol diffuser plate and injection ring facilitate airflow uniformity and aerosol dispersion for filter testing and/ or room certification.

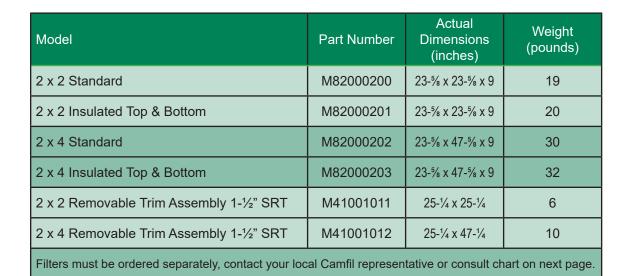
#### **Filter Retention Tabs**

Filter retention tabs secure the filter on the gel track and within the assembly.



#### **Optional External Insulation**

Pharmaslim modules are availabe with external foil-bank insulation on top and sides.



**Fasteners** 

Acorn nut grille fasteners are standard for securing grille to housing.

#### **Full Product Detail on Unit Labels**

Serial numbers are assigned to each hood after leak testing. This allows testing traceability.



## **Pharmaslim Ducted Ceiling Module**

All-Welded Roomside Replaceable Ducted Ceiling Module

### Camfil Megalam® Filters (ordered separately)

Camfil Megalam HEPA filters provide fine particulate control to meet the requirements of today's high technology clean rooms and clean areas. Offering configuration and performance flexibility, the Megalam filter will provide the highest level of protection for product processes and personnel. Standard gel seal filters contain polyurethane gel for knife edge seal. Silicone gel is recommended when a high degree of cleaning and sterilization agents are used or in a high temperature application.

#### Each Camfil Megalam filter:

- Is manufactured of micro glass fiber media. The media
  is pleated using Camfil's Controlled Media Spacing™
  technology. CMS™ ensures optimized filter element depth
  and pleat spacing, resulting in minimized configuration
  losses and low resistance to airflow.
- Includes continuous glass filament or thermoplastic separators to ensure uniform pleat spacing and form a

- rigid self supported media pack. Media-to-media contact, and associated fiber break-off, are eliminated.
- Includes a heavy-duty, lightweight anodized aluminum frame for high strength and ease of installation.
- Includes frame corners that are secured with Camfil's exclusive Klip-Lok™ mechanism for module durability and long-term integrity.
- Has a media pack which is sealed on all four sides using Camfil's CamPure<sup>™</sup> polyurethane sealant. CamPure is a fire-retardant, thermally/chemically stable, shockadsorbing polyurethane elastomer sealant assuring leakfree integrity and low-out gassing.
- Is manufactured in a ISO Class 7 (M 5.5, Class 10,000) clean room and tested in a ISO Class 5 (M 3.5, Class 100) clean space.
- Is tested using Camfil's AUTO-SCAN™ automated leak detection system. Filters are serialized, bar coded, and all data is provided on a label on the filter. This allows for filter traceability back to the raw goods of unit construction.



Pharmaslim Housing Size	Megalam Filter Part Number	Actual Size		Rated	Initial Resistance
		Width (inches)	Length (inches)	Airflow (cfm)	(inches w.g.) (tolerance ± 20%)
	53 MM (99.99% @ 0.3-micron)				
2 x 2	855028022	21-¾	20	233	0.52
2 x 4	855028370	21-¾	44	554	



For detailed specifications please consult your local Camfil Distributor or Representative or www.camfil.com. Camfil has a policy of uninterrupted research, development and product improvement. We reserve the right to change designs and specifications without notice.



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