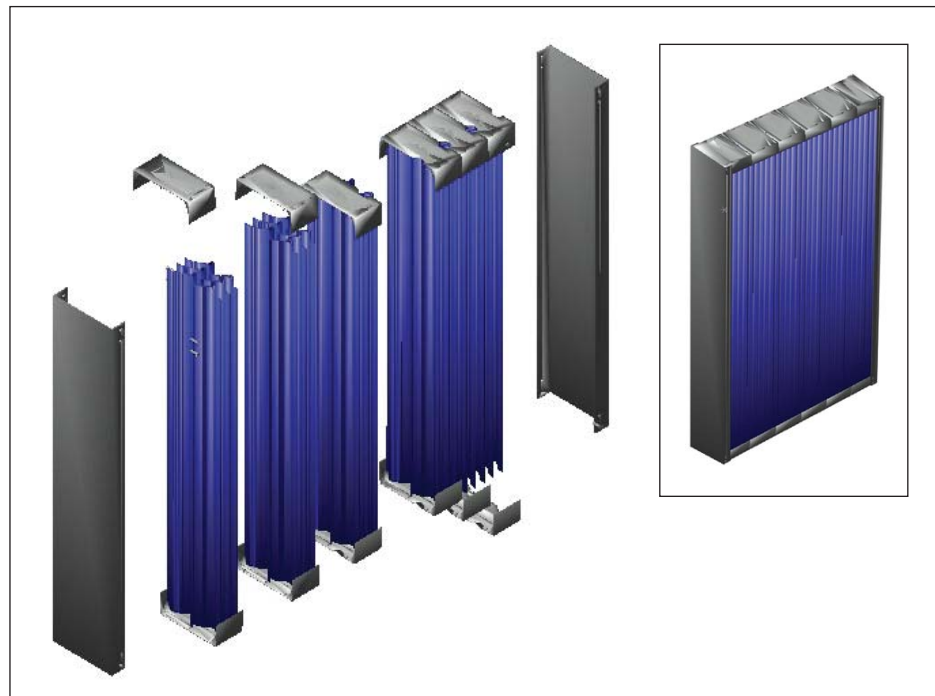


# DFM 4200 Modular Droplet Separator

# DFM 4200



DFM 4200 is a modular droplet separator system for installation in air washers and spray humidifiers. A set of top, bottom and side profiles that are easily connected to each other, build the droplet separator.

The modular system enables assembly and installation of the droplet separator almost without the use of tools.

The cassette-design is ideal for new air duct installations and for retrofitting existing units.

DFM 4200 modular droplet separator provides highly efficient droplet removal, even in very low velocity applications. This means smaller and less cost intensive new equipment installation.

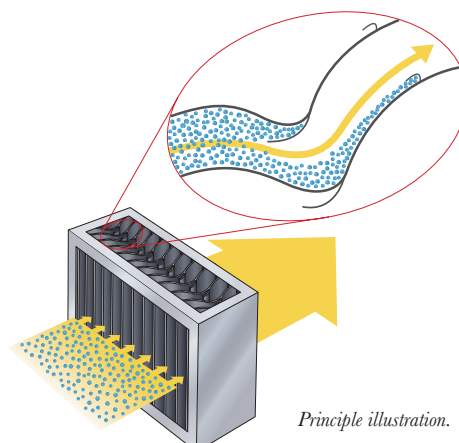
DFM 4200 modular droplet separator pays dividends in reducing corrosion, increasing filter lifetime, and reducing moisture throughout the system.

The unit is suitable for use at face velocities between 1 and 4 m/s.

## Separation technology

The streamlined separator profiles deflect the droplet laden gas stream, as a result the momentum of the droplets causes them to impinge onto the profile surface. The droplets coalesce together and form a liquid film, the influence of gravity causes the liquid to drain to the bottom of the profiles. Specially shaped separation chambers improve performance by enhancing the separation of finer droplets and ensuring problem free discharge of liquid.

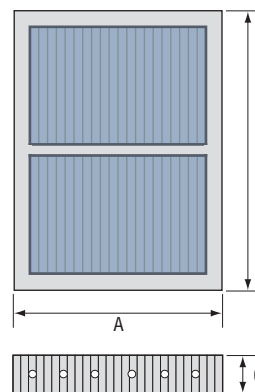
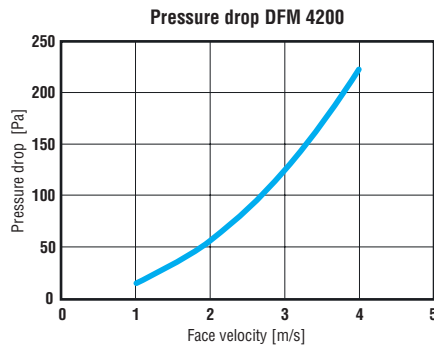
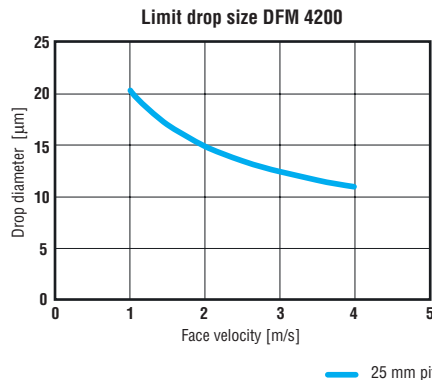
To avoid “flooding” of the profiles and the possibility of re-entrainment of the separated liquid, the height of the profile sections, modular droplet separators is normally limited to 2,000 mm.



Principle illustration.

## Equipment

- **Modular design**
- **Very quick and easy assembly**
- **High separation efficiency**
- **Wide face velocity range**
- **Specially designed for high liquid volume**
- **Tailor made sizes**
- **Low maintenance cost due to simple operating principle and long lifetime**
- **Highest quality material**
- **In house ISO 9001 certified manufacturing**



## Performance

The limit drop size represents a performance characteristic of the profile, at the relevant velocity and operating conditions it is the size of the smallest droplet that is completely separated. The diagram showing limit drop size has been calculated for an air/water system at 20 °C and 1 bar.

The pressure drop is measured at ambient conditions (20 °C and 1 bar) through a number of assembled profiles and under ideal conditions.

## Type, material and dimension specifications

Type code	Material		Pitch/spacing between profiles mm	Width* A mm min-max	Height* B mm min-max	Depth C mm	Operating temp °C min-max
	Frame**	Profile					
1b	304/PPTV	PPTVb	25	300-1,500	300-2,000	165	+5 - +100
1w	304/PPTV	PPTVw	25	300-1,500	300-2,000	165	+5 - +100

PPTV = Talcum reinforced polypropylene (b = black, w = white)

304 = Stainless steel (AISI 304, DIN 1.4301)

\*Standard tolerance on width and height: ±5 mm. \*\*Top and tray profile = PPTV, side profile = 304.

## Drainage positions



Drainage position	Code
Holes throughout the bottom already cut	P1
No bottom holes	P2

Holes throughout the whole bottom for use with separate housing/tray.

## Order information

### I Ready-to-install unit – R

Ready assembled frames for installation into prepared trays or air ducts.

### II Kit for self assembly – K

Cut-to-size components for complete frame – disassembled for small transportation volume – simple and quick assembly, including manual.

DFM 4200-X-X-X-X-X-X

Version (R or K) \_\_\_\_\_  
 Type code \_\_\_\_\_  
 Pitch/spacing, mm \_\_\_\_\_  
 Width, mm \_\_\_\_\_  
 Height, mm \_\_\_\_\_  
 Drainage code \_\_\_\_\_

e.g., DFM 4200-R-1b-25-650-990-P1



Ready-to-install unit – R



Kit for self assembly – K

### III Volume sales package\*.

Standard components – bulk – to be sized and assembled by customer.

\*Top and tray, side and droplet separator profiles form a unique package

#### Droplet separator profile.

DH 4200-PPTVb-6000-X

Length, 6,000 mm \_\_\_\_\_  
 Number of profiles \_\_\_\_\_  
 e.g., DH 4200-PPTVb-6000-200

### Top and tray profile.

DFM 4200-TB-X

Number of profiles \_\_\_\_\_  
 Length, 75 mm.  
 e.g., DFM 4200-TB-500

### Side profile.

DFM 4200-SP-X

Number of profiles \_\_\_\_\_  
 Length, 2,500 mm.  
 e.g., DFM 4200-SP-50

### Assembly profile (C-profile).

C-X-PPTVb-X

Pitch/spacing \_\_\_\_\_  
 25 mm \_\_\_\_\_  
 Number of profiles \_\_\_\_\_  
 Length, 297 mm.  
 e.g., C-25-PPTVb-450

DFM 4200 is developed and produced by Munters Euroform GmbH, Germany.



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