



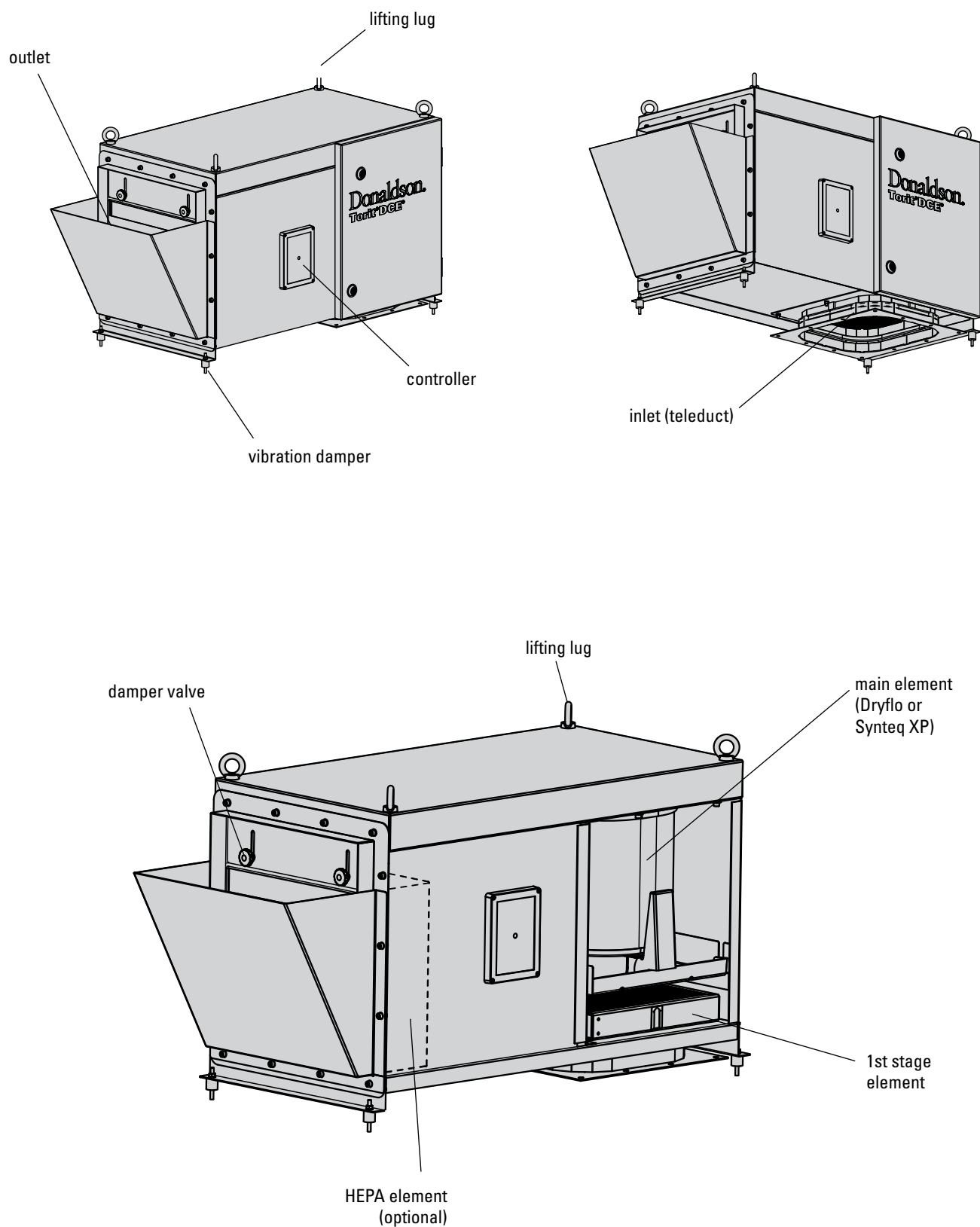
Donaldson  
FILTRATION SOLUTIONS

## DATA SHEET

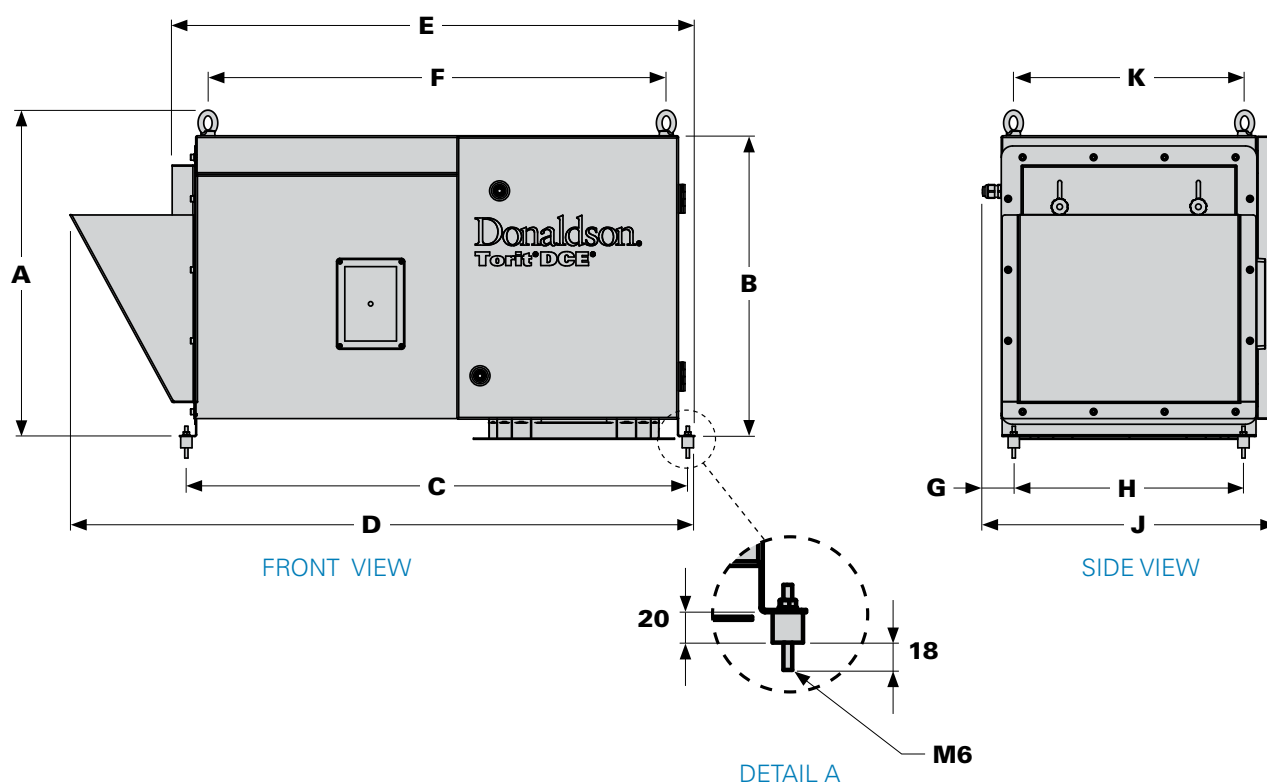
### **WSO Flex Mist Collectors** MMA and MMB



## UNIT OVERVIEW



## UNIT SPECIFICATIONS MMA - MMB



| Model | No. of filter elements | Filtration area Dryflo | Filtration area Synteq XP | dimensions in mm |     |      |      |      |      |    |     |     |     | Approx. net weight * |
|-------|------------------------|------------------------|---------------------------|------------------|-----|------|------|------|------|----|-----|-----|-----|----------------------|
|       |                        | [m²]                   | [m²]                      | A                | B   | C    | D    | E    | F    | G  | H   | J   | K   | [kg]                 |
| MMA   | 1                      | 3.8                    | 4.2                       | 575              | 530 | 883  | 1100 | 884  | 807  | 65 | 405 | 517 | 417 | 80                   |
| MMB   | 1                      | 7.6                    | 7.9                       | 733              | 680 | 1223 | 1470 | 1260 | 1147 | 59 | 500 | 616 | 507 | 110                  |

\* depends on type of configuration

### Operating temperature

5° to 60° C

### Standard finishing

RAL 5019 (blue)\*

\*Corrosion category C3 equivalent; this paint has been successfully tested resistible to mineral/cutting oils/fluids.

### NOISE

All measurements done in accordance with  
ISO 3744 / DIN 45635/1  
(usual tolerance)  $\pm 2$  dB(A)

### LpAeq

### MMA

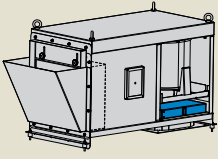
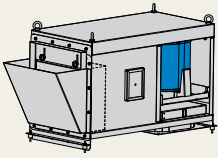
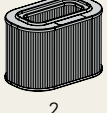
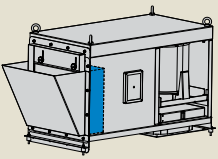
### MMB

### AC motor

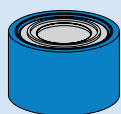
69 dB(A)

72 dB(A)

## FILTER ELEMENT SPECS

|                 |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>STAGE 1:</b> |  | <p>Dependant on the application, a different first stage prefilter can be selected</p> <ul style="list-style-type: none"> <li>• Metal wire mesh (standard)</li> <li>• Polypropylene mesh for heavy liquid loading applications (optional)</li> </ul>                                                                                                                                                                   |
| <b>STAGE 2:</b> |  | <ul style="list-style-type: none"> <li>• Dryflo element with Element Wrap (standard) - 1</li> <li>• Synteq XP element (optional) - 2</li> </ul> <div style="display: flex; justify-content: flex-end; align-items: center; gap: 20px;">   </div> |
| <b>STAGE 3:</b> |  | HEPA H13 (optional)                                                                                                                                                                                                                                                                                                                                                                                                    |

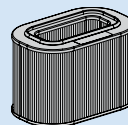
## DRYFLO - SYNTEQ XP



**Dryflo**

Dryflo cartridge filters use a combination of two proprietary filtration media and are specially designed for applications using water-soluble coolants.

|                | <b>MMA</b> | <b>MMB</b> |
|----------------|------------|------------|
| <b>Height</b>  | 206        | 305        |
| <b>Outer Ø</b> | 276        | 417        |



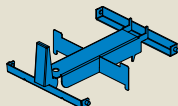
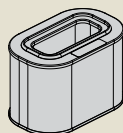
**Synteq XP**

Synteq XP cartridge filters are made with an engineered blend of small and large fibers with a proprietary, resin-free bonding system. For applications that produce water soluble coolant, straight oils and oily smoke.

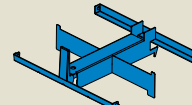
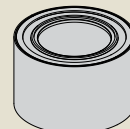
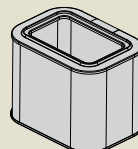
|                | <b>MMA</b> | <b>MMB</b> |
|----------------|------------|------------|
| <b>Height</b>  | 254        | 382        |
| <b>Outer Ø</b> | 387        | 502        |
| <b>Width</b>   | 241        | 362        |

The Synteq XP and Dryflo element have different heights. When you order the Dryflo, a platform twist is provided as default.

**MMA**



**MMB**



## HEPA (OPTIONAL)

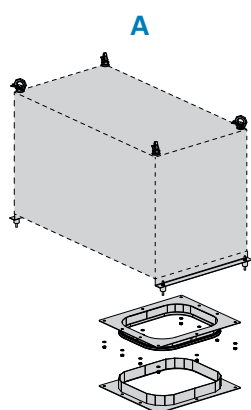
| [mm]       | width | height | depth | pleat depth |
|------------|-------|--------|-------|-------------|
| <b>MMA</b> | 400   | 330    | 120   | 90          |
| <b>MMB</b> | 500   | 350    | 140   | 120         |

| HEPA RESTRICTION |          |                 |
|------------------|----------|-----------------|
|                  | Q [m³/h] | INITIAL ΔP [Pa] |
| <b>MMA</b>       | 570      | 295             |
| <b>MMB</b>       | 1100     | 325             |

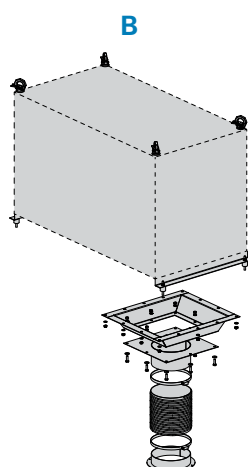
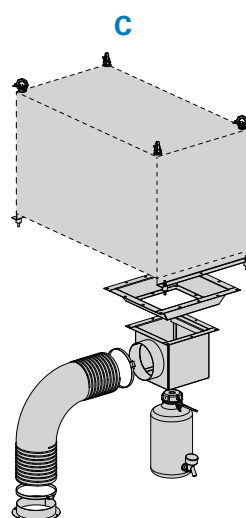
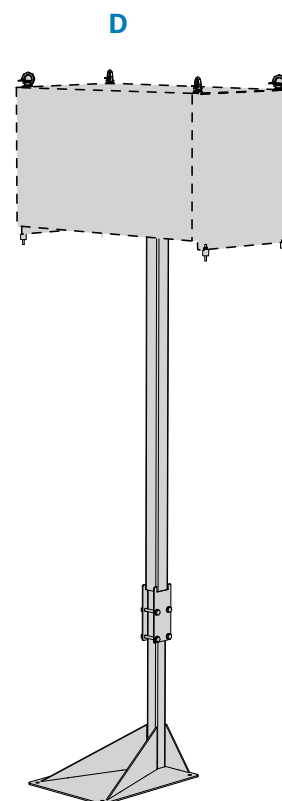
|                          |               |
|--------------------------|---------------|
| <b>HEPA class</b>        | H13           |
| <b>seal</b>              | gasket around |
| <b>Maximum humidity:</b> | 100% RH       |

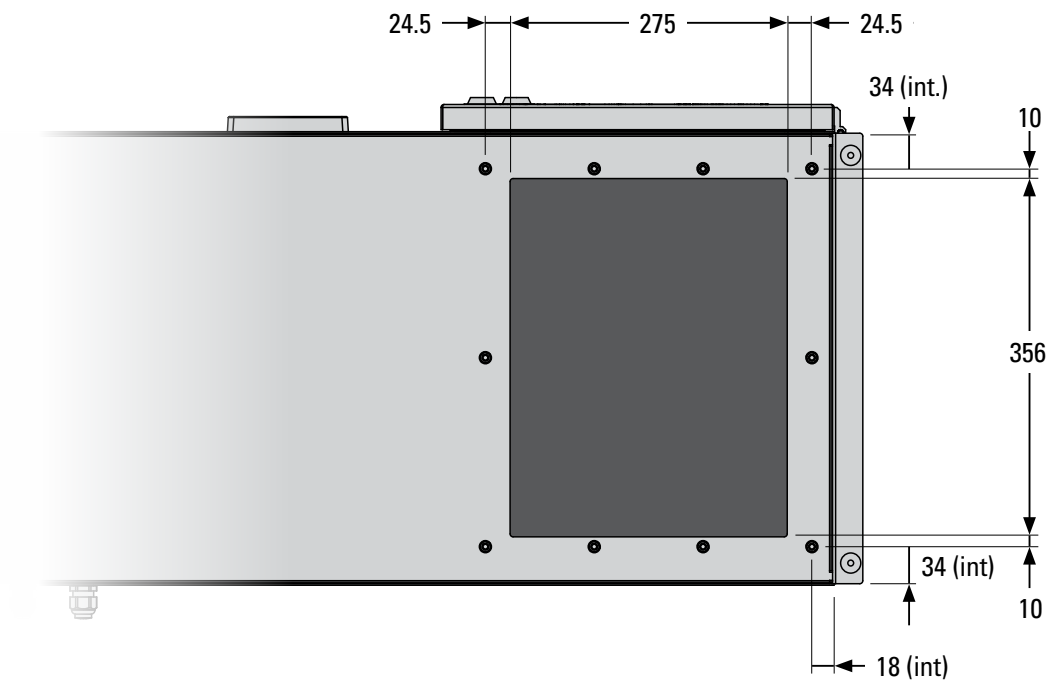
## INLET PACKS

| Description |                                    | MMA      | MMB      |
|-------------|------------------------------------|----------|----------|
| <b>A</b>    | Teleduct                           | standard | standard |
| <b>B</b>    | Inlet hopper with flexible duct    | option   | option   |
| <b>C</b>    | Inlet hopper with impact separator | option   | option   |
| <b>D</b>    | Adjustable mounting stand          | option   | N/A      |

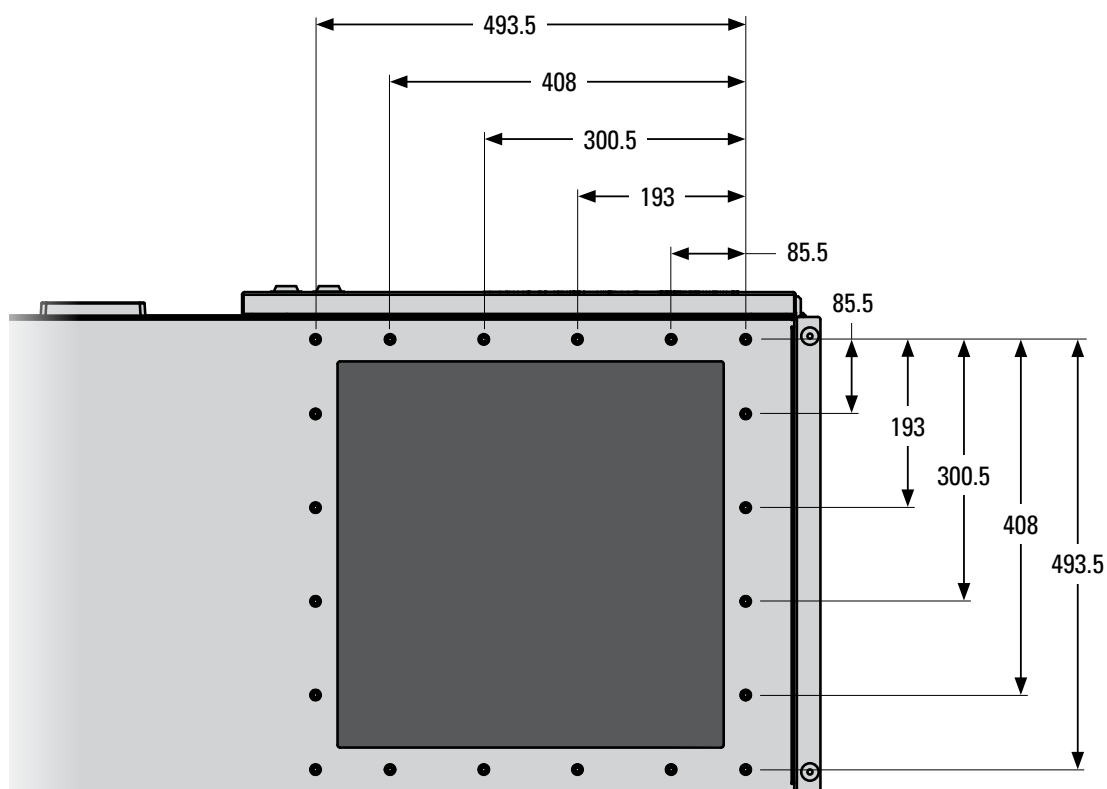
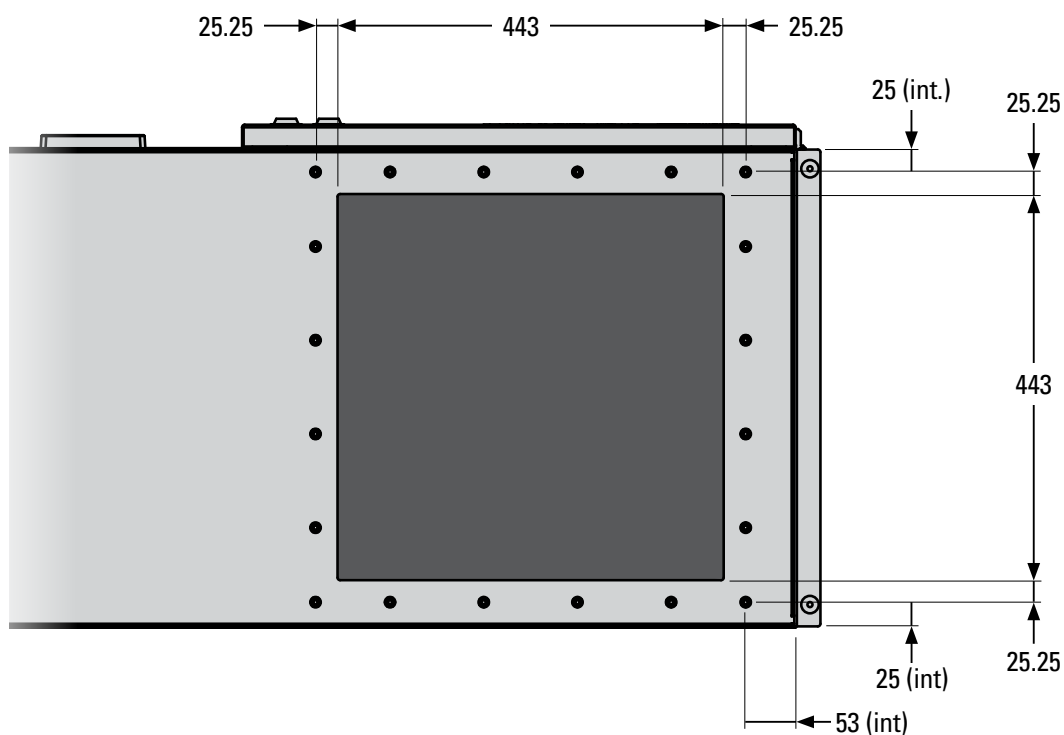


teleduct

inlet hopper with  
flexible ductinlet hopper /  
impact separatoradjustable  
mounting stand

**INLET INTERFACE MMA**

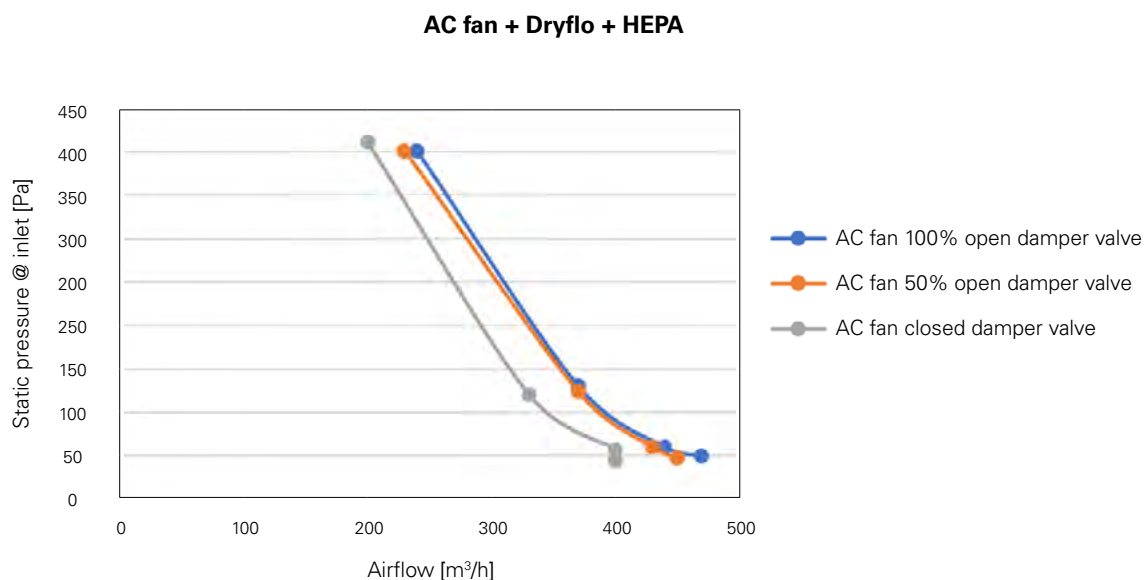
BOTTOM VIEW - MMA

**INLET INTERFACE MMB**

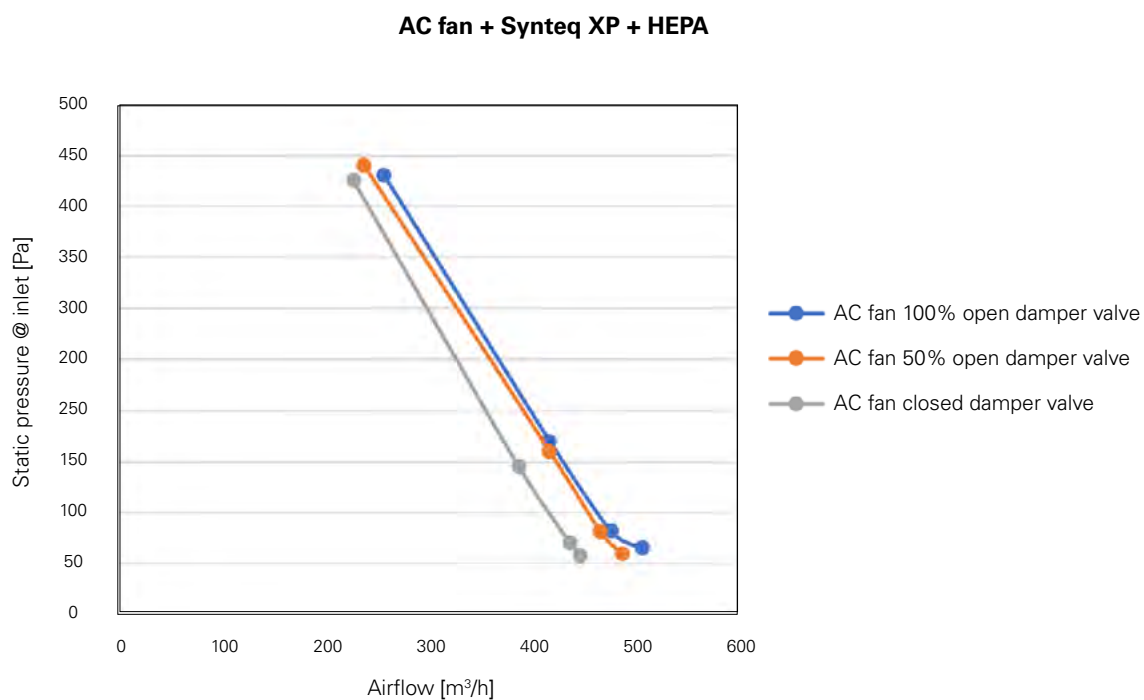
BOTTOM VIEW - MMB

## UNIT PERFORMANCE CURVES AND FAN SET SPECIFICATIONS

### MMA AC FAN

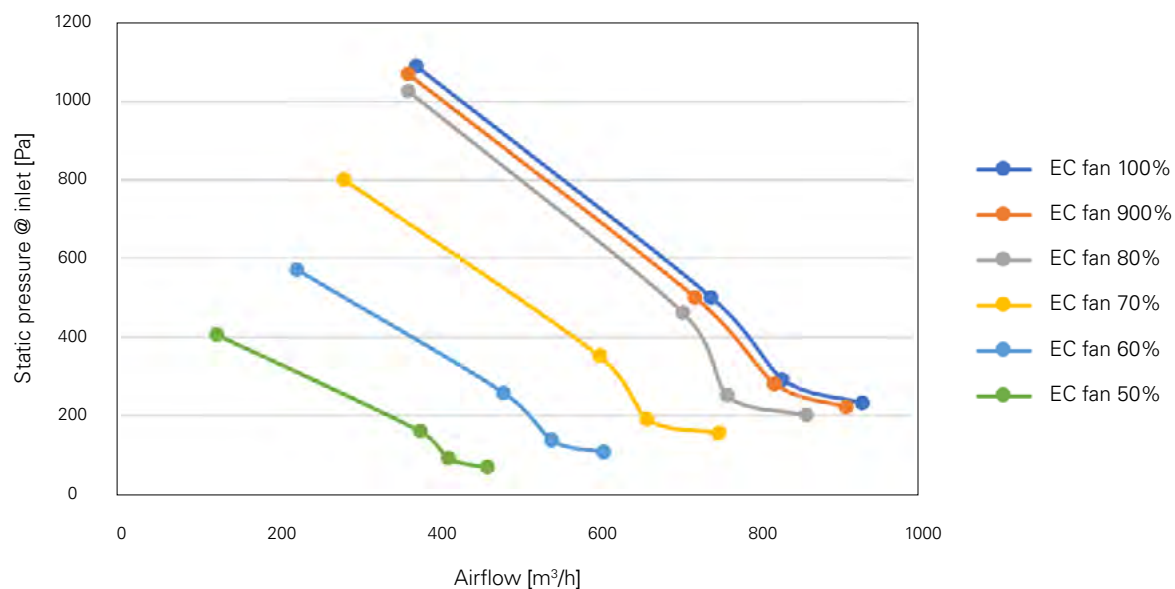


Using damper valve on MMA gives a range of airflow from 2% (half open) to 10% (closed) less its full capacity.

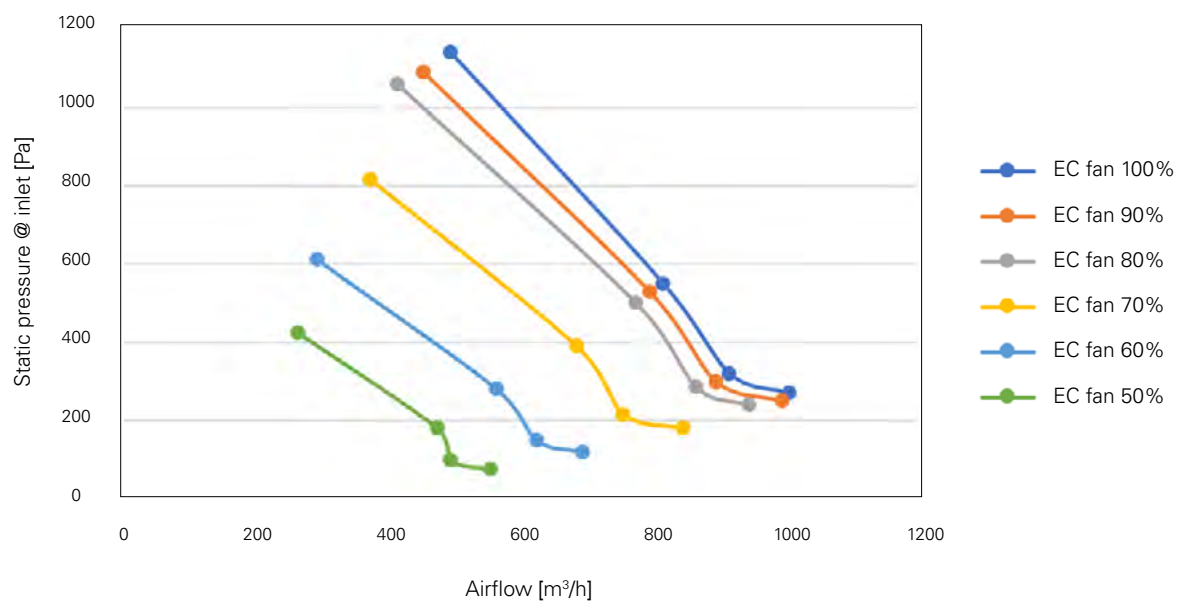


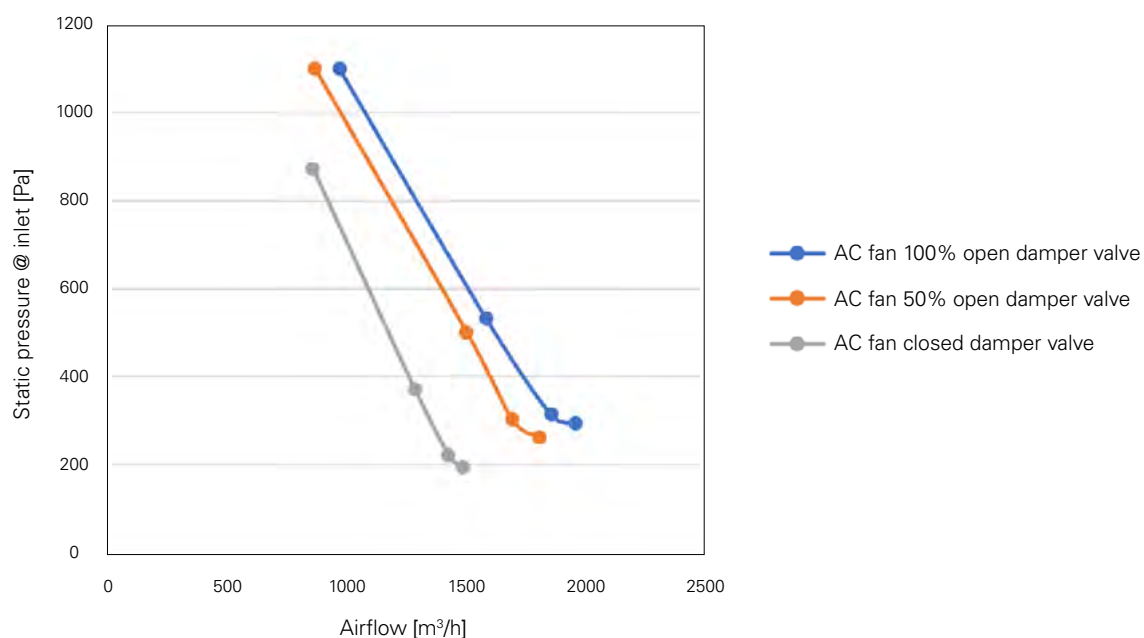
### MMA EC FAN

#### EC fan + Dryflo + HEPA

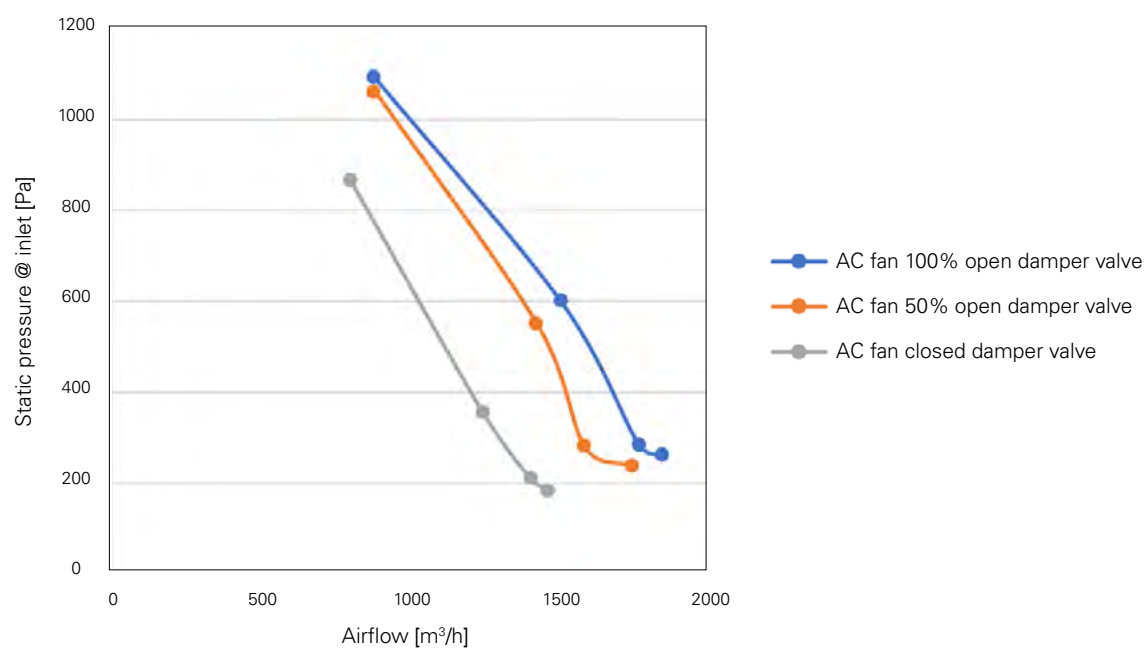


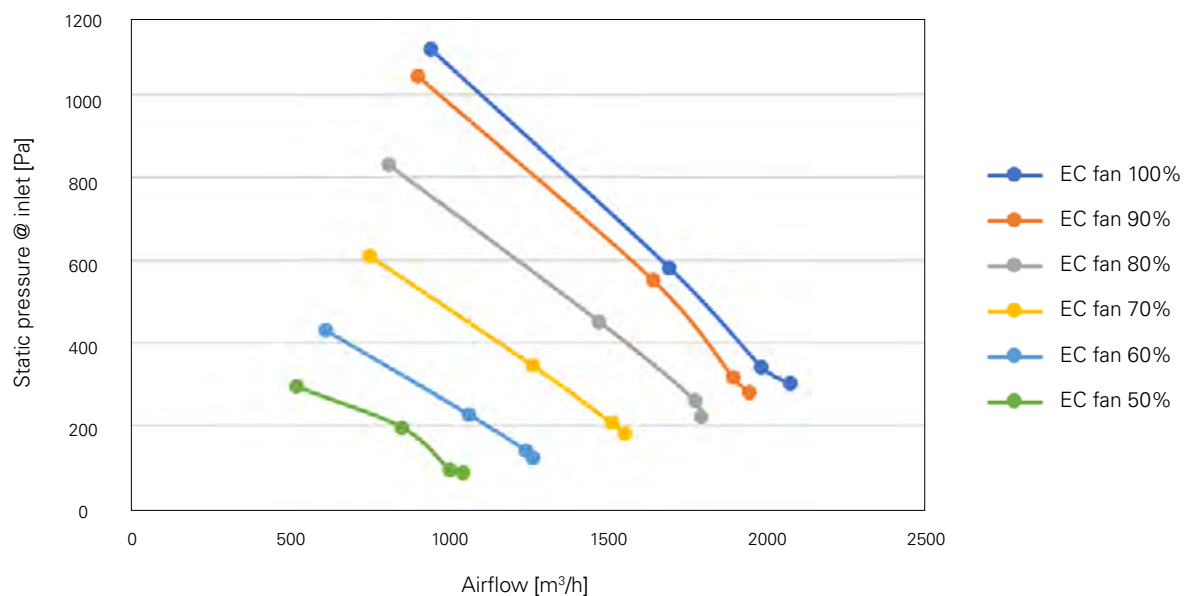
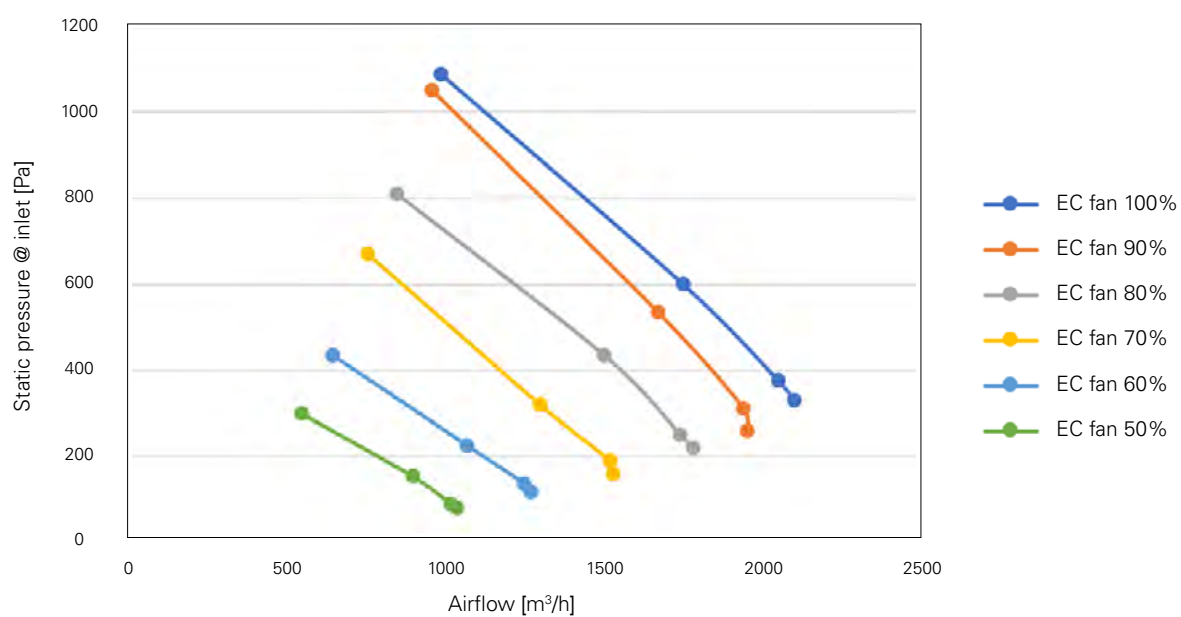
#### EC fan + Synteq XP + HEPA



**MMB AC FAN****AC fan + Dryflo + HEPA**

Using damper valve on MMB gives a range of airflow from 2% (half open) to 10% (closed) less its full capacity.

**AC fan + Synteq XP + HEPA**

**MMB EC FAN****EC fan + Dryflo + HEPA****EC fan + Synteq XP + HEPA**

| AC FAN MOTOR SPECIFICATION |            |         |
|----------------------------|------------|---------|
| <b>Power</b>               | <b>MMA</b> | 0,75 kW |
|                            | <b>MMB</b> | 1,1 kW  |
| <b>Voltage</b>             | 400V       |         |
| <b>Cycle</b>               | 50 Hz      |         |
| <b>Speed</b>               | ~ 2750 RPM |         |

| EC FAN WSO FLEX MMA               |                   |              |
|-----------------------------------|-------------------|--------------|
| <b>Nominal voltage range</b>      | V                 | 3~ 380 ..480 |
| <b>Frequency</b>                  | Hz                | 50/60        |
| <b>Fan speed n</b>                | min <sup>-1</sup> | 4000         |
| <b>Input power P<sub>ed</sub></b> | W                 | 1180         |
| <b>Current draw I</b>             | A                 | 1.8          |
| <b>Mass</b>                       | kg                | 8.8          |

| EC FAN WSO FLEX MMB               |                   |              |
|-----------------------------------|-------------------|--------------|
| <b>Nominal voltage range</b>      | V                 | 3~ 380 ..480 |
| <b>Frequency</b>                  | Hz                | 50/60        |
| <b>Fan speed n</b>                | min <sup>-1</sup> | 3410         |
| <b>Input power P<sub>ed</sub></b> | W                 | 1800         |
| <b>Current draw I</b>             | A                 | 2.8          |
| <b>Mass</b>                       | kg                | 18           |

## CONTROLLER ALARM SETTINGS

WSO Flex is equipped with an LCD controller. It comes with pre-installed default alarm settings for the main and HEPA filter element. If for any reason these values do not suit your application, they can be manually adjusted.

How to set the controller: see WSO Flex manual and controller manual (included at delivery).

| Recommended alarm settings [Pa]<br>(contact application engineering) |      |      |
|----------------------------------------------------------------------|------|------|
| Type                                                                 | Main | HEPA |
| <b>MMA</b>                                                           | 600  | 1500 |
| <b>MMB</b>                                                           | 1000 | 1500 |

## NOTES

[illegible]

|                       |                                                                                                                                                                                                   |                        |                                                                                                                                                                                                     |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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