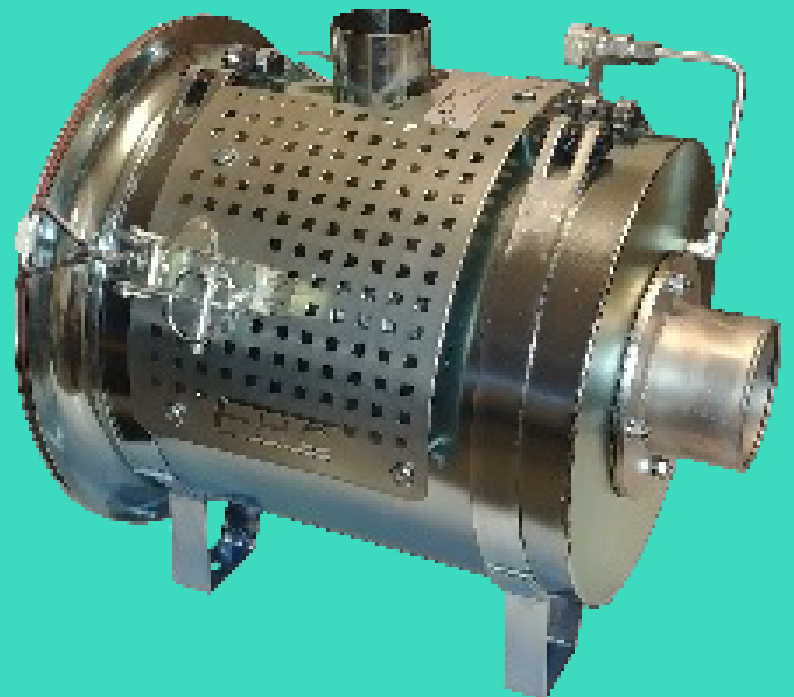


**INDUSTRIAL  
EMISSIONS  
CONTROL  
DIESEL  
EXHAUST  
FILTERS**



**AIRFLOW DYNAMICS**

Wherever plant and machinery is being operated inside buildings or in enclosed or confined spaces, fitting a portable exhaust filter complies with the requirements of HSE and gives complete peace of mind to the operators.

Dynax exhaust filters are the result of many years of research and rigorous testing. They are proven to remove 99% of all 0.4 $\mu$  particulate matter including mutagenic, cancerous and allergy producing substances that are absorbed in their surface.

As soon as the engine starts, the filters are working 100% effectively. However, albeit un-quantified, it has been shown that their effectiveness improves with use beyond their design, as the gases are flowing through an increasing build-up of carbon on the inside of the filter which acts as a catalyst to convert the gases.

## **CONTENTS**

- 5-6 HT-series filters**
- 7 L20 filters**
- 8 P15 filters**
- 9 Spares and adaptors**
- 10 Hoses and fittings**
- 11 Gas flow calculator**

# EXHAUST GASES CAUSE CANCER

Diesel driven vehicles or machinery operating indoors, even for very short periods of time, present a health hazard until the exhaust emissions are effectively controlled.

Among the especially exposed occupational groups are machine operators and personnel in workshops, garages, warehouses etc. While the health risks are naturally more evident for those who drive or work close to the vehicles, persons in adjoining areas are also at risk of exposure.

## The very small particles are the big problem

Exhaust emissions are a mixture of gases and carbon particles coated with various organic and non-organic substances.

They contain more than 40 substances that are listed as hazardous air pollutants and, of these, 15 can cause cancer.

With the improving technology of modern engines, exhaust emissions are getting harder to see because the particles are becoming increasingly smaller. Particles down to 20 microns (20,000 nm) are

visible to the naked eye but 90 percent of exhaust gas particles measure less than 1 micron (1,000 nm).

These smaller, lighter particles remain airborne for longer, which means that they spread further and that they are more easily absorbed and penetrate further into the lungs. The short-term effects of exhaust emission exposure are coughing, difficulties in breathing or asthma attacks. In the long-term, problems arise with chronic bronchitis, reduced lung capacity, and in the worst event, lung cancer.

The traditional solution has used fan assisted ventilation, to provide general extraction to the area or to extract the fumes at source and vent to the outside. In many cases, this is neither economical nor feasible. The Airflo Dynamics solution employs portable exhaust filters, easily mounted either directly on the exhaust pipe or on the vehicle with a short hose connected to the exhaust pipe.

Airflo Dynamics uses EHC filters that stop over 99% of hazardous particle emissions.





# PLANT AND MACHINERY

**Dynax** exhaust filters are designed for both temporary and permanent use on plant and machinery. They are a very durable design in either stainless steel or alu-zinc coated mild steel.

- 100% effective from cold
- Not affected by humidity
- Disposable filter elements
- Protective heat shield
- Filter-blind signal

We offer a nationwide rental service on this range of filters.

They are ideally suited for use in construction and engineering environments on such as cranes, forklift trucks, tele-handlers, access platforms, excavators, dumpers, skid-steer loaders etc.

Filtration: 99%  $\geq 0.4\mu$   
 Max temperature: 250°C  
 Weight: HT10 23Kg  
           HT20 34Kg  
           HT35 50Kg

## ENGINE SIZE

Refer to chart on page 11

## STANDARDS

EHC filters meet the following emissions standards: TUV S 129.99.00; TRGS554 (D); COSHH (GB) and VERTFilter List (CH) B135.

## ENVIRONMENTAL

EHC filter elements are treated as normal waste for disposal.

## FILTER LIFE

Filter life is dependent on the engine size, type, condition and how it is used (see page 11).



# 3-WAY VALVE

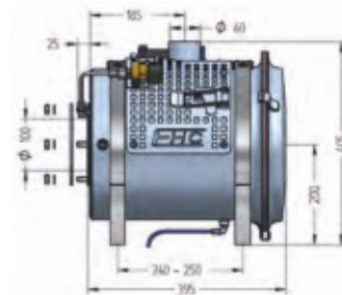
## MAXIMISE FILTER LIFE WITH A 3-WAY VALVE

When machines are operating both indoors and outdoors, and site regulations are not specifying outdoor filtration, installing a 3-way valve in front of the filter is a convenient way of fully complying with regulations and maximising filter life.

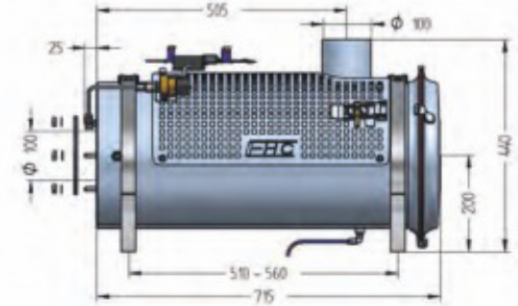
The 3-way valve allows the exhaust gases to bypass the filter and is operated either mechanically by a lever on the valve, or electrically from the comfort of the cab.

For fully automatic operation, an optional sensor kit is available to operate the valve as the machine enters and leaves the building.

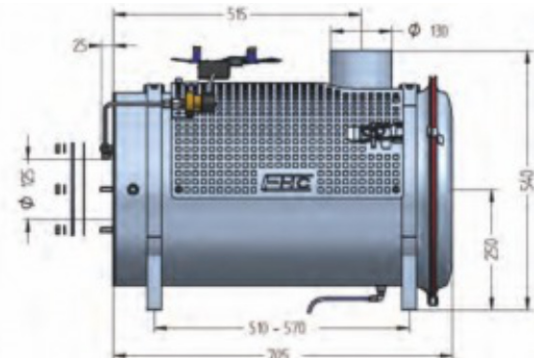
HT10



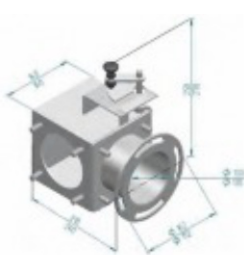
HT20



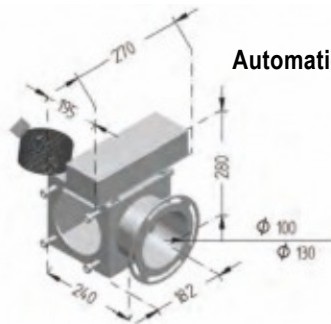
HT35



Manual



Automatic



# COMMERCIAL VEHICLES

**EHCL20** exhaust filters are designed for intermittent, short-run use on heavy vehicles up to 10 litres engine capacity. They are ideal for use in workshops, factories, ships, exhibition halls etc, on vehicles such as trucks, buses and tractors.

- 100% effective from cold
- Not affected by humidity
- Disposable filter elements
- Protective heat casing
- Filter-blind signal

We offer a nationwide rental service on this range of filters.



## TECHNICAL DATA

Filtration: 99%  $\geq 0.4\mu$   
 Max temperature: 300°C  
 Weight: Single 7Kg  
 Twin 11Kg

## ENGINE SIZE

Max capacity 10 litres  
 Max RPM: 1200

## STANDARDS

EHC filters meet the following emissions standards: TRGS554 (D), COSHH (GB), VERT B272 and TÜV Nord nr. 0931TP00149.

## ENVIRONMENTAL

EHC filter elements are treated as normal waste for disposal.

## FILTER LIFE

Filter life is expected to be around 100 engine starts but is dependent on the engine size, type, condition and how it is used.





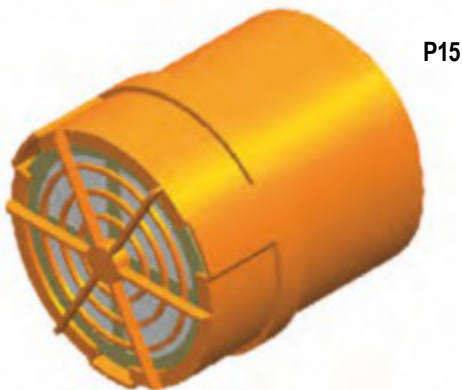
# CARS & LIGHT VEHICLES

**P15** exhaust filters are designed for intermittent, short-run use on cars and light vehicles up to 4 litres engine

capacity. They are ideal for use in workshops, factories, ships, exhibition halls etc, on vehicles such as cars and vans.

- 100% effective from cold
- Not affected by humidity
- Disposable filter elements
- Protective heat casing
- Filter-blind signal

We offer a nationwide rental service on this range of filters.



## TECHNICAL DATA

Filtration: 99%  $\geq 0.4\mu$   
 Max temperature: 300°C  
 Weight: Single 0.4Kg

## ENGINE SIZE

Max capacity 4 litres  
 Max RPM: 2500

## STANDARDS

EHC filters meet the following emissions standards: TRGS554 (D), COSHH (GB), VERT B272 and TÜV Nord nr. 0931TP00149.

## ENVIRONMENTAL

EHC filter elements are treated as normal waste for disposal.

## FILTER LIFE

Filter life is expected to be around 150 engine starts but is dependent on the engine size, type, condition and how it is used.





# SPARES AND ADAPTORS

HT35 filter element



HT20 filter element



HT10 filter element



L20 filter element



P15 filter element



HT flanged inlet



L20 single unit connector



L20 twin unit connector



L20 straight bellows connector



L20 angled bellows connector



L20 hose connector



P15 stepped connector

Ø 45 - 25 mm  
Ø 70 - 35 mm  
Ø 100 - 50 mm



P15 angled stepped connector

Ø 50 - 30 mm  
Ø 70 - 30 mm



P15 twin stepped connector

Ø 45 - 25 mm  
Ø 65 - 35 mm



P15 stepped connector with plug

Ø 35 - 60 mm



Connector with bellows



Twin connector with bellows



# HOSES AND FITTINGS



## Flexible metal hose

- Ø 38 mm
- Ø 51 mm
- Ø 76 mm
- Ø 102 mm
- Ø 128 mm
- Ø 153 mm



## Elbow 90°

- Ø 38 mm
- Ø 51 mm
- Ø 76 mm
- Ø 102 mm



## Elbow 180°

- Ø 102 mm



## HT connector sock

- Ø 102 mm



## U bolt clamp M8

- Ø 45 mm
- Ø 57 mm
- Ø 83 mm
- Ø 114 mm

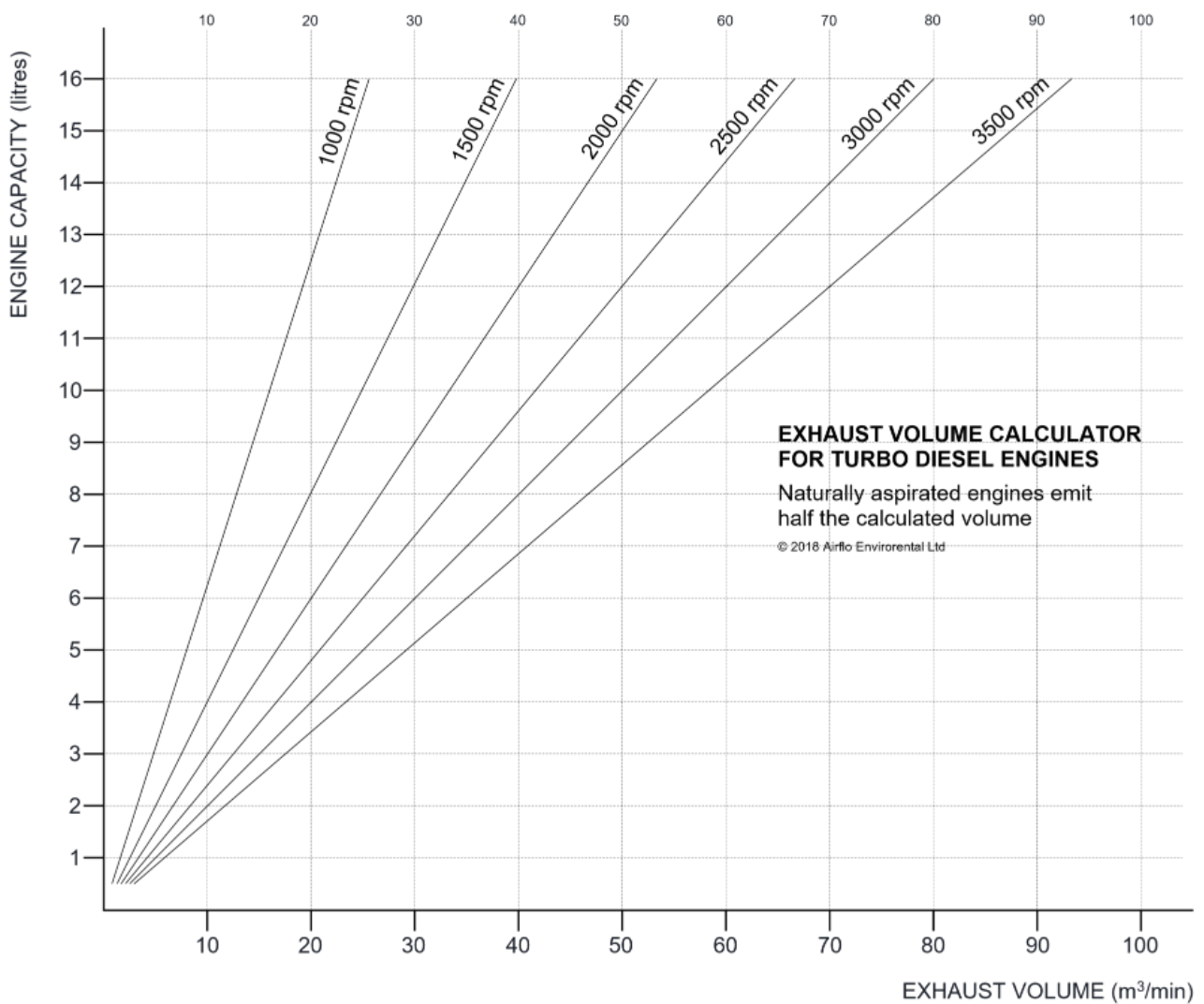


## Heavy duty bolt clamp W2

- Ø 23-25 mm
- Ø 25-27 mm
- Ø 27-29 mm
- Ø 29-31 mm
- Ø 31-34 mm
- Ø 34-37 mm
- Ø 37-40 mm
- Ø 40-43 mm
- Ø 43-47 mm
- Ø 47-51 mm
- Ø 51-55 mm
- Ø 55-59 mm
- Ø 59-63 mm
- Ø 63-68 mm
- Ø 68-73 mm
- Ø 73-79 mm
- Ø 79-85 mm
- Ø 85-91 mm
- Ø 91-97 mm
- Ø 97-104 mm
- Ø 104-112 mm
- Ø 112-121 mm
- Ø 121-130 mm
- Ø 130-140 mm
- Ø 140-150 mm
- Ø 150-162 mm



# GAS FLOW CALCULATOR





**EVERYTHING  
WE DO IS  
REVOLVING  
ROUND YOU.**

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