

Pre Filter Unit

Type XT-F1



- Compact design
- Easy filter replacement
- Variable temperature setting
- Modular construction
- High tightness
- 4 positioning opportunities



Digital form at:
[www.cgs-company.de/
downloads/MDZ_E_D_XT-F1.pdf](http://www.cgs-company.de/downloads/MDZ_E_D_XT-F1.pdf)

Removal of a representative measuring gas from the exhaust of different combustion engines is one of the most important and at the same time most difficult tasks of online analysis. Selection of the suitable preparation modules poses a special problem for the user that requires careful observation of many factors. The preparation modules of the **XT-LINE** series by CGS makes it much simpler to set up a complex analysis system. The XT-F1 is the entrance model of the series and suitable for use in diesel, petrol or gas engines. The XT-F1, heated to max. +200°C, switch and pressure-relieve the sample gas in its full equipment.

The integrated TWIN-filter is equipped with a ceramics surface filter with a filter mesh of 0.5 µm by default. An optional fine filter element with 0.1 µm can be placed on the present filter holder on demand in addition to the standard filter. Variable functions for back-flushing the filter and pre-flushing to the measuring system are already integrated.

The XT-F1 can be equipped with up to 3 measuring gas inputs and one measuring gas output (for more inputs, please choose module XT-F2) and thus serves to switch different tapping points. Of course, the heated tapping lines of the measuring gas inputs (max. 3 plus 1 output line) are also controlled by the module.

The patented pneumatically controlled valves that connect the selected gas paths up to 3.5 bar (a) are placed on the filter/switching block. For higher inlet pressures up to 10 bar (a) the specially CGS developed high pressure valves will be used. They are switched by solenoid valves. The solenoid valves are controlled via the integrated CGS control. Control of the internal heating circuits and the connected heated measuring gas lines is also performed by the integrated control unit.

The XT-F1 can be equipped with an optional pressure controller that reduces high pressures from the exhaust to protect downstream analysis systems. Many sensors used provide information on temperature and pressures at all times.

An additional feature is the flexible installation of the module in 4 different positions.

MDZ_E_D_XT-F1_1.3

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Technical data

- Power consumption: Depending on design max. 16 A
- Piping: 8/6 mm Pipe Fitting
- Max. inlet pressure: max. 3.5 bar abs. ; 10 bar high pressure [higher pressures on demand]
- Control air: 6 bar
- Classification control air: Filtered compressed air, oil free, by ISO 8573-1, Class 3.4.3
- Temperature sensor: NiCr-Ni (Type K), PT100, Fe-CuNi
- Materials:
 - Utility zone: Stainless steel 1.4305 & 1.4404 / PTFE
 - Housing: Aluminium, anodized/ powder-coated
- Power supply: 230 V/50 Hz (Mains-connection cable 3 m)
- Heating power internal: 600 W
- Heating power external:
 - Input: 3 x 540 W (max.)
 - Output: 1350 W (max.)
- Temperature: up to +200°C
- Filter fineness: 0.5 µm (option additionally 0.1 µm)
- Measurements (WxHxD): 350 x 525 x 350 mm
- Weight: 29.5 kg

Accessories

- Heated pipe in various lengths
- Gallows mounting
- Heated wall duct

Options

- 3 Sample gas inlets
- Purge air outlet
- Pressure controller
- Low air pressure switch

Gas flow scheme

