# TYDAC INTERNATIONAL



# **ContaminationTest Module – Extraction Flushing**

CTM-EF 3xxx

# **Description**

The ContaminationTest Module CTM is a modular system for inspecting components with reference to their technical cleanliness. It cleans the particulate contamination from the surface of the module via wet sampling and transfers it via diaphragm to later analysis.

The CTM-EF 3xxx extraction module is used for flushing in conjunction with the CTM-SC 3xxx.

## **Applications**

- Automotive and supplier industry
- Gearbox and engine builders
- Mobile hydraulics
- Manufacture of hydraulic and lubrication system components
- Aircraft industry

#### **Advantages**

- Reduction in costs as a result of less production waste
- Identification and elimination of weak points in processes
- Reduction of failures before delivery
- Internal and external process optimisation
- Customised documentation of the technical cleanliness of components

#### **Technical details**

| General data                        |   |
|-------------------------------------|---|
| Ambient temperature                 | 15 to 28°C  |
| Filter membrane holder              | for Ø 47 filter membranes                         |
| Weight when empty                   | ≈ 110 kg  |
| Dimensions (height x width x depth) | 1.60 x 0.60 x 0.60 m                              |
| Self-cleaning                       | with an integrated orifice                        |
| Fill level monitoring               | Ultrasonic sensor                                 |
| Reservoir filling volume            | Up to 60 litres                                   |
| Reservoir material                  | Polished stainless steel 1.4301                   |
| Housing material                    | S235JR powder-coated                              |
| Hydraulic connection                | Screw connection acc. to ISO8434-1-BHS-L12-1.4571 |
| Built-in drip tray                  | 36 litres with drain                              |
| Compressed air supply               | ≥ 6 bar   |
| Electrical data                     |   |
| Supply voltage                      | Acc. to model code                                |
| Power consumption                   | 50 W  |
| Protection class to DIN 40050       | IP 54   |

# **Negative control values**

All data is dependent on the ambient conditions

| Periphery              | CTM-EF 34xx | CTM-EF 36xx |
|------------------------|-------------|-------------|
| Clean room             | 0.2 mg      | 0.3 mg      |
| Laboratory             | 0.2 mg      | 0.3 mg      |
| Separate sampling room | 0.2 mg      | 0.3 mg      |
| Factory building       | 0.2 mg      | 0.3 mg      |

#### CTM-EF 34xx / CTM-EF 36xx

| Max. particle size (metallic) | Workload | Cleaning time [h]<br>after brief<br>shutdown (≤ 24 h) | Cleaning time [h]<br>after extended<br>shutdown (> 24 h) |
|-------------------------------|----------|---|--|
| [µm]                          |          |   |  |
| 100                           | High     | 1 to 4  | 1 to 4   |
| 150                           | Medium   | 1 to 2  | 1 to 2   |
| 200                           | Low      | 0.5   | 0.5  |

#### **Type**

CTM = ContaminationTest Module

#### Module

EF = Extraction Flushing

#### <u>Series</u>

= series

#### Reservoir filling volume

- = 40 litres (nominal)
- 6 = 60 litres (nominal)

#### Version

= Includes integrated suction tool for the recovery of the test liquid after extraction from the test item and an integrated mechanism which changes the flow direction across the test item via connection A' (flow direction A' to R' and R' to A'), version 2021

#### **Analysis fluid**

- = Feroclean / CTF 1300 (flash point > 60 °C, lower explosion limit > 0.6 vol. %)
- = water with surfactants, permitted pH values 6–10, no desalinated water or Feroclean / CTF 1300 (flash point > 60 °C, lower explosion limit > 0.6 vol.%)

#### Supply voltage of option

- = 120 V AC / 60 Hz / 1 phase USA/Canada
- M = 230 V AC / 50 Hz / 1 phase Europe
- = 240 V AC / 50 Hz / 1 phase UK
- = 240 V AC / 50 Hz / 1 phase 0 Australia
- = 100 V AC / 50 Hz / 1 phase Japan
- Ζ = without

#### **Extraction method**

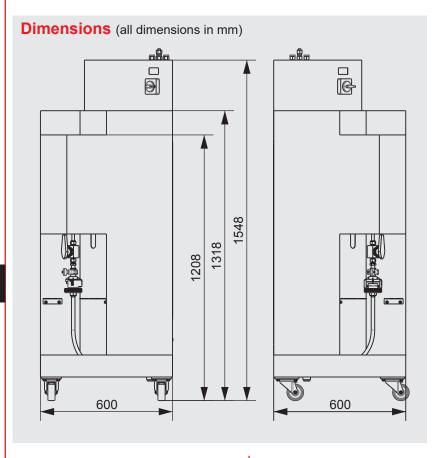
= spray, medium pressure, flow rate up to 18 l/min

### Supplementary details

= series

#### **Modifications**

= without modifications



# EN 7.675.2/11.21

# Scope of delivery

- CTM-EF 3xxx
- 3x connection hose, length 3m
- Network cable
- Technische Dokumentation

# **NOTE**

The information in this brochure relates to the operating conditions and applications described.

For applications or operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

**HYDAC FILTER SYSTEMS GMBH** Industriegebiet
D-66280 Sulzbach / Saar

Tel.:+49 (0) 6897/509-01 Fax:+49 (0) 6897/509-9046 Internet: www.hydac.com E-mail: filtersystems@hydac.com