PAMAS
Partikelmess- und Analysesysteme

PAMAS S50P Fuel
Online Particle Counter for fuel applications

PAMAS S50P Fuel
Contamination Control and Condition Monitoring of liquid fuel

- cost effective, high performance laser based online particle counting system with eight size channels
- flexible integration into monitoring facilities for Aviation Turbine Fuel
- LED display showing the contamination class code according to ISO 4406 in the size classes > 4 µm(c), > 6 µm(c) and > 14 µm(c)
- The volumetric cell design of PAMAS sensors measures 100% of the sample flow and guarantees highest accuracy and reproducibility.
- The particle number and size distribution of all 8 size channels is reported in real time to PC or PLC (programmable logic controller). The optional analysing software saves the measuring results and shows them in tables and graphs. This makes trends and events easily visible.
- Due to its measuring accuracy and its trend monitoring feature, PAMAS S50P Fuel reduces the risk of failures and ensure the reliability of the controlled operating system.

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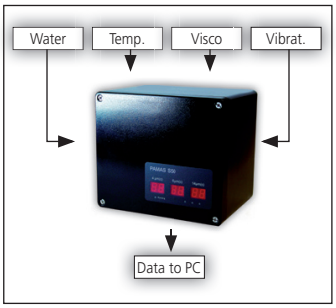
PAMAS S50P Fuel

Online particle counter for stationary condition monitoring of liquid fuel

The **PAMAS S50P Fuel** measures the cleanliness of liquid fuel. Its rugged construction makes it resistant against mechanical, environmental and electrical threats.

Condition Monitoring - more value for less money:
The online particle counter **PAMAS S50P Fuel** optionally has four analogue inputs on board for four 4-20 mA signals that may be sent to a PC. Additional condition monitoring data coming from external sensors, e.g. water content, oil temperature, viscosity, vibration or pressure, can be sent together with the particle counts in real time to the PC. This interface function makes the **PAMAS S50P Fuel** a powerful instrument for condition monitoring.



PAMAS S50P Fuel may serve as interface for condition monitoring transferring four analogue signals (4-20 mA) to a PC.

Early alert in case of contamination:
Beginning failures in fuel systems (e.g. corrosion) result in the early appearance of big particles. Due to its eight size channels, the online particle counter **PAMAS S50P Fuel** is able to detect bigger particles. Instantaneous alert prevents the filling of contaminated fuel into the tank.

Size µm (c)	Particles / 100 ml
> 4	29497
> 6	7090
> 10	2393
> 14	960
> 21	383
> 25	190
> 38	133
> 70	12

More than just providing the triple code according to ISO 4406, PAMAS S50P Fuel measures the particle number in eight different size channels and early alerts in case of failures caused by bigger particle sizes (e.g. corrosion).

Software:
After measurement, the measuring results can be analysed with the software POV (PAMAS Online Visualisation) for Contamination Control and long-term Condition Monitoring.

Pressurised sampling:
The **PAMAS S50P Fuel** is equipped with a wear resistant ceramic piston pump controlling the flow rate to 25 ml/min at a pressure range from 0 to 6 bar.

TÜVRheinland ZERTIFIZIERT
Management System
ISO 9001:2008
www.tuv.com
ID 9105038017

Technical data:

Counter:
Particle measurement in eight size channels:
> 4 µm(c), > 6 µm(c),
> 10 µm(c), > 14 µm(c),
> 21 µm(c), > 25 µm(c),
> 38 µm(c) and > 70 µm(c)

Pressure range:
0 - 6 bar

Data transfer:
- standard equipment: RS 485 interface.
- optional equipment: analogue 4-20 mA interface. Parallel data transmission for the size channels 4, 6, 14 and 70 µm(c) or serial data transmission for all eight size channels.

Volumetric sensor: PAMAS HX
Calibration range::
4-70 µm(c) according to ISO 11171

Maximum particle concentration: 24,000 p/ml at a flow rate of 25 ml/min and a coincidence rate of 7.8%. The sensor measures triple codes from 0/0/0 to 22/22/22 according to ISO 4406.

Size:
230 mm x 200 mm x 180 mm

Weight:
5,0 kg

Case protection:
IP 64

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