

Portable Contamination Measuring System

Pic 9100

max. operating pressure 315 bar

1. Description

- Rugged portable unit for quick and simple particle analysis on site
- Simple menu-driven operation
- Laser sensor with 12 channels for exact and reproducible results
- Possibility of suction and pressure side operation
- Integrated suction pump with new system. Flow regulation independent from viscosity and pressure
- Prior to each measurement automatic flushing of the gauge head
- Adjustable measuring mode (single and cyclic measurements)
- Long term measurements up to 330 hours
- Memory bank for 1400 measurement values (up to 99 series).
- **Calibration according to ISO 11171:1999 (NIST)**
- **Analysis according to ISO 4406:1999**
Analysis according to ISO 4406:1987
Class 1 up to 24
- Analysis according to NAS 1638
Class 0 up to 12
- Measuring range ISO 4402: 2 - 100 μm
Measuring range ISO 11171: 4 - 50 μm
- Indication of the absolute numbers of particles in all channels
- Serial interface for further data processing via PC
- Integrated printer
- Threshold function contact for preset min. and max. classes



Subject to technical alteration without prior notice!

2. Technical Manual

The portable particle counter Pic 9100 consists of a sensor with pump/volume regulation unit, particle counter with display and an integrated printer.

All systems are fitted in an aluminium case.

The connections for suction, pressure and return line are fixed at the outer side of the case.

For the electrical connection cables and hoses separate compartments are available..

3. Specification

Pressure connection	: Measuring connection M16, max. 315 bar (Minimeß)
Suction connection	: Screw connection 6 L, max. 10 bar
Return line	: Screw connection 6 L
Pressure fluctuation	: permissible
Medium	: hydraulic fluids, fuels, water, provided the fluid is optically homogenous
Viscosity range	: max. 500 mm ² /s, on suction side max. 100 mm ² /s
Temperature range	: Ambience: 0 to 50 °C; Fluid: 0 to 80 °C
Sensor flow rate	: 40 ml/min
Flushing volume flow	: 40 ml/min
Measuring volume	: 10 to 100 ml, adjustable (10 ml steps)
Volume prior to counting	: 10 to 50 ml, adjustable (10 ml steps)
Counting time	: 15 s
Cycling time	: 1 to 99 min
Sensor	: Laser diode sensor
Number of channels = 12	: >2 / >5 / >15 / >25 / >50 / >100 µm according ISO 4406: 1987 (extended) : >4 / >6 / >14 / >25 / >50 / >100 µm according ISO 4406: 1999 (extended)
Indication acc. NAS 1638	: 2-5 / 5-15 / 15-25 / 25-50 / 50-100 µm
Measuring range NAS-classes	: 0 to 12
Indication acc. ISO 4406: 1987	: >2 / >5 / >15 µm
Indication acc. ISO 4406: 1999	: >4 / >6 / >14 µm
Measuring range ISO-classes	: 1 to 24
Calibration	: according ISO 11171:1999
Power supply	: 115 / 230 VAC; 50 / 60 Hz; version with accumulator 12 VDC
Dimension	: 400 x 240 x 380 mm
Weight	: approx. 12 Kg

4. Software/Display

The indication is effected by a LCD with 8 lines. Capability up to 99 series of measurements with max. 1400 measurement values.

Analysis according ISO 4406: 1987, ISO 4406: 1999 and NAS 1638

Printing output of number of particles and ISO/NAS classes.

The indication of number of particles and the corresponding NAS/ISO classes is adjustable.

Serial interface is available for data output.

For control purposes availability of threshold function contact for pre-adjustment of min. and max. ISO/NAS classes (potential free switch-over contact).

5. Options

Data transfer to notebook (graphic illustration) with "LOG and SHOW" - software.

Accumulator version for mobile use

Bottle sampling- and adapter-kit

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