

# PAMAS S40 WG

## Portable Particle Counting System for Water Based Hydraulic



### PAMAS S40 WG

**Compact analysing system  
for hydraulic fluids in the  
off shore oil industry**

**User-friendly operation  
using touch screen with  
graphic display**

The volumetric cell design of PAMAS sensors guarantees the highest accuracy, resolution and best statistical information

Result according to:  
ISO 4406:1999, SAE AS 4059D,  
ISO 4406:1987, NAS 1638,  
GJB 420A, GOST 17216

- Real portability with lab system accuracy
- User can configure the system to their needs in profiles
- Pressurized sensor avoids degassing
- Display and printout provide triple ISO codes, NAS- and SAE cleanliness classes, measurement volumes, and particle numbers
- Highest repeatability and accuracy Password protected user levels
- Storage of more than 500 measurement data sets
- Built-in battery for data backup
- User-friendly download software
- Operates on 90 - 230 V AC (50/60 Hz), or 12 - 30 V DC, or internal battery
- External degassing unit available

# Pamas S40 WG

## Delivers laboratory - quality on-site results



The PAMAS S40 WG is designed for engineering work shop and laboratory use. It is small and portable and can be easily relocated to where it is needed. It is tried and tested with a reputation for dependability in the most demanding production environments.

Incorporating high resolution PAMAS laser light blockage technology trusted throughout industry for reliability and accuracy.

Pressurised sensor reduces the need for degassing allowing the counter be plugged in and used on line up to 100 psi. pressure. No need to send samples to the laboratory, with a built in liquid pump the PAMAS S40 WG can draw its own samples from a bottle, producing results quickly where they are needed.

The PAMAS S40 WG is simple to operate via the touch screen user interface. A variety of sampling profiles can be created offering choices of Standards such as NAS 1638 and AS 4059.

The number of channels requiring analysis, such as AS 4059 bands A to F, 6 channels or B-F, 5 channels can also be preconfigured.

The sample size and the duration can also be varied and preconfigured.

The operator simply selects the sampling profile from a drop down option list on the touch screen then proceeds by selecting start.

Rugged and tough portable workshop or laboratory particle counter; including a built in battery for mains free operation.

The PAMAS S40 WG is a compact portable instrument for measuring hydraulic fluids used in the off shore oil industry.

The PAMAS S40 WG Laser particle counter is built for those hard working applications where flexibility in the work place is essential.

The unit has built in protection from contamination including BACK FLUSH operation to remove over contamination from the system.

Specifically designed for the measurement of Water/Glycol hydraulic fluids and is compatible with subsea fluids such as Oceanic HW540, Oceanic 443, Castrol Trans aqua and Niche Pelagic 100.

Intelligent yet simple to operate the PAMAS S40 WG reports results to NAS1638 and AS SAE4059 and ISO cleanliness classes.

AS 4059 special report function for class B to F only. Producing a result printout for these size bands where they are specified.

Calibration according to ISO 11171:1999, according to NAS 1638 with NIST traceable standards.

Tried and trusted for flushing and qualification of Christmas trees, HPU's, subsea umbilical's, hydraulic accumulators, valves and control systems. With the online capability the PAMAS S40 WG is ideal for integration in to flushing rigs, offering real time results in NAS1638 and AS 4059.

### Applications

- Water/Glycol Hydraulic fluid flushing
- Christmas trees
- HPU's
- subsea umbilical's
- hydraulic accumulators
- valves and control systems

Compatible with water/glycol hydraulic fluids including the following:

- MacDerimid -Oceanic HW 540, 443, 443r
- Castrol- Transaqua series
- Niche Products -Pelagic 100

### Key features

- Online continuous test capability
- Individual bottle sampling
- Portable
- Light weight and compact
- Microsoft compatible software included
- Built-in printer
- Built-in battery
- 8 variable channels
- ISO 4406
- NAS 1638
- SAE 4059 (A-F)
- SAE 4059 (B-F)

### Technical data

#### Sampling system:

- Wear resistant ceramic piston pump with controlled constant flow.

#### Pressure range:

- From pressureless up to 7 bar (100 psi)

#### PAMAS Volumetric Sensor:

HCB-LD-50/50

Size range:

- 4 - 70 µm(c) (ISO 11171:1999)
- 1 - 100 µm (ISO 4402:1991)
- 1 - 400 µm (ANSI/NFPA)

#### Max. particle concentration:

- 20,000 p/ml at flow rate 25 ml/min at 5% coincidence

#### Controller:

- 32-bit high performance CPU with sophisticated programmable digital domain signal conditioning and 4096 internal channels
- Data printout: 32 column thermo printer
- Data transfer: 8 bit ASCII code through USB port (57600 baud)
- Power supply: 90 - 230 V AC (50 - 60 Hz) 12 - 30 V DC, internal battery (for up to 2h operation) LiCl battery for memory backup
- Weight and Size: Approx. 9 kg 300mm x 140mm x 300mm

9001: 2000



DIN EN ISO 9001:2000

Zertifikat: 01 100 061898

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