PCM500 Series Fluid Cleanliness Monitor

PIPCM500EN

The PCM500 Cleanliness Monitor is a portable diagnostic monitoring device that provides a measurement of system fluid cleanliness.

The PCM500 uses proven mesh blockage technology to report accurate, reliable, 3 part ISO cleanliness codes for most types of fluids, in all types of environment.

- Monitors mineral, synthetic, or water based fluids
- Results are unaffected by the presence of water, air, or if the fluid is dark
- Get accurate, 3 part* ISO cleanliness code results in under 6 minutes and take preventative action quickly
- Upload real-time results directly to mobile devices for analysis and action
- 'Pass off' cleanliness of new builds quickly and confidently

Protect your systems from catastrophic failure by detecting abnormal fluid cleanliness conditions quickly.

The PCM500 can be permanently installed to monitor critical applications (including component test facilities) or used as a portable device for routine condition monitoring of various fluid systems.

PCM500 Cleanliness Monitor

PCM500 Monitor Features

- Proven mesh blockage technology provides accurate 3-part* ISO 4406, AS 4059 Table 1 (NAS 1638) or AS 4059 Table 2 cleanliness codes
- Measures fluid cleanliness, temperature, viscosity plus options for water content
- Self cleaning procedure between each test ensures optimum accuracy of results
- Compact, robust, fully self contained portable design (fluid sampling pump included)
- Simple to use, colour touch screen interface
- Long battery life for extended operation in remote locations
- Supplied with a heavy-duty wheeled flight case for ease of transportation

**3 part code measured at 4 µm, 6 µm and 14 µm per ISO 16338.*

Operation

The colour LCD touch screen allows simple menu driven input of sample identification, monitor configuration and data output.

The HD screen displays real time data and test results which are automatically stored for subsequent trending and evaluation. An optional Bluetooth/USB controlled printer allows the operator to produce a hard copy of the test results if required.

All ancillary components for high and low pressure on-line sample monitoring are contained within the monitor, with sufficient internal power to complete 35 tests between charges. (Mains power can be used if preferred).

For further protection and ease of transport, thePCM500 is supplied in a robust flight case.

Specifications

Power supply:	90-260 VAC or integral 12 VDC Lithium Ion battery
Battery life:	Typically 35 samples
Temperature Range:	5 °C to 80 °C (41 °F to 176 °F) (dependent on fluid type)
Compatibility:	Water glycols, aqueous solutions. Petroleum and synthetic oils (hydraulic lubricating, dielectric, etc.), fuels, industrial phosphate esters.
Seals:	Fluorocarbon
Operating Viscosity:	1.5 to 450 cSt (30 to 2,200 SUS)
Pressure:	0 to 315 bar (4570 psi) max
Monitoring range:	*ISO 4406:* < 11/9/7 to 23/21/17 *SAE AS 4059* Table 1 Class 1 to 12 (derived from NAS 1638) *SAE AS 4059* Table 2 > 4 µm 1A to 12A, > 6 µm 1B to 12B > 14 µm 1C to 12C
Water in Oil % RH:	± 2 % at 5 to 95 % RH (PCM500W)
Accuracy:	± 1/2 ISO 4406 Code
Ports:	Communication 3 x USB's (Data Acquisition, PC Setup, Printer), RS232C (PLC Control)
Enclosure:	IP 65 (NEMA 4)
Weight:	10.8 kg (23 lb) *with case:* 21.6kg (47.62 lb)
Dimensions:	*PCM:* 400 x 260 x 250 mm (15.8 x 10.2 x 10 inches) *Case:* 650 x 350 x 390 mm (25.6 x 13.8 x 15.4 inches)

The PCM500 is supplied with the default language set to English. Other languages may be accessed via the HMI menu.

For operating manuals in all languages, visit www.pall.com.

Ordering Information

This is a guide to the Part Numbering structure only, for specific options, please contact Pall.

PCM500 [1] MA

Table 1: Water Sensor

Code	Description
None	No Water Sensor fitted
W	Water Sensor fitted

Table 2: Connectors

Code	Description
MA	Fluid Inlet connections: *High Pressure:* 1/4" BSP female swivel with metric, imperial or NPT test point connector *Low Pressure:* 1/4" BSP Female swivel fitting Power leads supplied covering UK, USA, Europe & Asia male plug formats

Printer Kit and Accessories

PCM500-PRTA

Important: The PCM500W model is fitted with a sensor to measure water content in oil and produce a % relative humidity or PPM value. Do not use this model of PCM500 with water based fluids or permanent damage will occur.

Wheeled carry case protects the PCM500 in transit

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The information provided in this literature was reviewed for accuracy at the time of publication. Product data may be subject to change without notice. For current information consult your local Pall distributor or contact Pall directly.

IF APPLICABLE Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

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